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GULF OF MEXICO PHYSICAL AND CHEMICAL DATA FROM *ALASKA* CRUISES

SPECIAL SCIENTIFIC REPORT–FISHERIES No. 249

UNITED STATES DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

EXPLANATORY NOTE

The series embodies results of investigations, usually of restricted scope, intended to aid or direct management or utilization practices and as guides for administrative or legislative action. It is issued in limited quantities for official use of Federal, State or cooperating agencies and in processed form for economy and to avoid delay in publication.

United States Department of the Interior, Fred A. Seaton, Secretary
Fish and Wildlife Service, Arnie J. Suomela, Commissioner

GULF OF MEXICO PHYSICAL AND CHEMICAL DATA FROM ALASKA CRUISES

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With a note on

SOME ASPECTS OF THE PHYSICAL OCEANOGRAPHY OF THE GULF OF MEXICO

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Special Scientific Report: Fisheries 249

Washington, D. C.

October 1958

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A B S T R A C T

This report is principally a list of chemical data collected aboard the U. S. Fish and Wildlife Service M/V ALASKA while she was engaged in a biological and oceanographic survey of the Gulf of Mexico. The tables include observations on salinity, temperature, sigma-t, nitrate-nitrite nitrogen, total phosphorus, inorganic phosphorus, "carbohydrates", and "proteins". Some special data on the uranium and phosphorus content of certain water samples and sediments are included. A brief introduction includes remarks on the physical oceanography of the Gulf of Mexico and the study of organic compounds.

ALASKA

GULF OF MEXICO PHYSICAL AND CHEMICAL DATA FROM ALASKA CRUISES

INTRODUCTION

Before 1950 the only systematic surveys of the chemical features of the entire Gulf of Mexico were the cruises of MABEL TAYLOR in 1932 (Parr, 1935) and ATLANTIS in 1935 (Bulletin Hydrographique, 1936). Partly as a result of military interest in the oceans and partly because of an increased demand for sea foods, the oceanic environment began to attract renewed and more intensive attention following World War II. Because of the added stimulus of a great increase in the value of the annual shrimp and menhaden production in the Gulf of Mexico, Congress authorized the U. S. Fish and Wildlife Service to expand its investigations of the fisheries and oceanography of Gulf waters. This effort encompassed physical oceanography, marine biology and chemistry, and exploratory-fishing operations.

The biological section of the program was assigned to the Gulf Fishery Investigations with headquarters at Galveston, Texas. The physical oceanography was assigned to the Texas Agricultural and Mechanical College Department of Oceanography through U. S. Navy Office of Naval Research and the Bureau of Ships.

The cruises were planned with the Texas A. and M. group, and were designed to conform to the needs of the oceanographic problems. One of the major oceanographic problems concerned the water transport system in the Yucatan Channel, southeastern Gulf, and Florida Strait area. The majority of the cruises were directed to that region. All plans for biological observations were adapted to the requirements of the hydrographic program.

The observations fell into these categories: Salinity and temperature data for dynamic computations, meteorological observations, chemical determinations (other than salinity) for biological interpretation, and plankton collections.

The data pertaining to dynamic computations, and some inorganic phosphorus values, have been published in a preliminary form by the Texas A. and M. Department of Oceanography (1954, 1955). The plankton data will be presented in separate reports.

This report will present all chemical, physical, and meteorological data. The climatological, salinity, and temperature data have been taken from the A. and M. reports and are included here for the convenience which comes from having all data listed in the same place. The following explanations apply to all cruises, but when special conditions apply to a given cruise they will be found at the head of the tables for that cruise.

METHODS

1. Collection of chemical samples on shipboard.

   Salinity. Samples were drawn from standard Nansen bottles into 4-ounce prescription bottles with bakelite screw caps. Each sample bottle was wrapped tightly with plastic electrician's tape at the juncture of cap and bottle.

   Total phosphorus. Handled as above except that thorium carbonate was added according to Harvey (1948).

   Nitrate-nitrite nitrogen; inorganic phosphorus, carbohydrate, protein (tyrosine, tyrosine-tryptophan) samples were preserved in the frozen state according to the method given by Collier and Marvin (1953).

2. Analytical methods.[1/]

1/ Most salinity determinations and all phosphate-P, nitrate-nitrite-N, carbohydrate, tyrosine, and tyrosine-tryptophan determinations were made in the Galveston laboratory under the direction of Messrs. K. T. Marvin and P. J. Wangersky. Mr. Marvin supervised the interpolation of all values for standard depths except salinity, temperature, and density, which were done by the Texas A. and M. Department of Oceanography.

Salinity. As described by Knudsen (1901). Electrometric end points were used after August 1951.

Inorganic phosphorus. By the method of Robinson and Thompson (1948), except that a Fisher electrophotometer was used to measure color intensity.

Total phosphorus. By the method of Harvey (1948), except that the Fisher AC electrophotometer was used to measure color intensity.

Nitrate-nitrite nitrogen. By the method of Marvin (1955).

Protein (tyrosine and tyrosine-tryptophan index). The values are given in milligrams per liter of tyrosine-tryptophan for the first three cruises, and for tyrosine thereafter. The determinations for the first three cruises were according to the method of Erdman and Little (1950) and for the remainder by an adaptation of the method of Sizer and Peacock (1947). There are no data for interconversion of the results. Wangersky developed the latter method and his description follows:

> "The sea water samples were treated with an equal volume of 0.25 normal NaOH, then autoclaved for five hours at a pressure of forty pounds. The samples were transferred after cooling to centrifuge tubes, a small amount of celite was added to each tube, and the samples then spun for ten minutes at 900 - 1000 revolutions per minute. The supernatant liquid was then drawn off into a quartz or silica spectrophotometer cell, and read at 2400 A. on the Beckman model D. C. spectrophotometer.
>
> "Since a few of the sample bottles may lose fluid by expansion during the autoclaving, the samples were run in triplicate. The slope of the Beer's law curve for this analysis varies with the temperature, pressure, and time of heating, making it advisable to run a full set of standards with each batch of samples. The celite was added in order to settle the slight haze of colloidal magnesium hydroxide, which would have otherwise given a false high reading. If the celite was added before the autoclaving, the high temperature caused it to decompose, giving a reading even higher than the magnesium hydroxide alone.
>
> "The standards and blanks were made equivalent to normal sea water in NaCl and Mg ++."

Carbohydrates. By the method of Erdman and Little (1950). See also Collier at al. (1953), and Zein-Eldin and May (in press).

URANIUM AND PHOSPHORUS CONCENTRATIONS IN CERTAIN SAMPLES OF WATER AND SEDIMENTS FROM THE GULF OF MEXICO

At the time these cruises were in progress the U. S. Geological Survey was interested in the uranium and phosphorus concentrations in the water and bottom sediments. The samples were collected aboard the ALASKA and forwarded to the Trace Element Section of the Geological Survey for analysis. We are indebted to the Geological Survey through Dr. Frank Grimaldi and his associates for making these data available for inclusion here. The data are presented in the following tables. Phosphorus was determined by a method essentially that of Quinlan and DeSesa (1955). Uranium was determined by fluorometric analysis (Grimaldi, May, and Fletcher, 1952).

REMARKS ON ANALYSES OF ORGANIC COMPOUNDS

Since this is the first oceanographic investigation to incorporate a systematic survey of specific classes of organic compounds, it is appropriate to give some of the reasons for doing so.

It is known that biologically active organic compounds exist in solution or suspension in variable concentrations in natural sea waters (Collier, Ray, Magnitsky, and Bell, 1953). The possible significance of these compounds was reviewed by Collier (1953). The generally low concentrations of carbohydrate-like materials in the Gulf of Mexico was suspected and recognized in our early work (Collier et al., 1953). However, when the present series of oceanographic studies was being planned it was considered desirable to study this matter in more detail.

Table 1.--Phosphorus and uranium content of some bottom samples collected on Alaska cruises 2 and 3.

Cruise 2

Station	Depth (fathom)	Percent P_2O_5	Percent U
1	10	0.11	0.0003
3	12	0.12	0.0003
5	12	0.09	0.0003
7	15	0.12	0.0005
9	14	0.11	0.0003
11	17	0.09	0.0003
13	12	0.08	0.0003
15	21	0.11	0.0004
17	32	0.11	0.0003
18	62	0.18	0.0003
21	1140	0.18	0.0003
23	1360	0.16	0.0003
27	580	0.20	0.0003
30	325	0.20	0.0003
31	25	0.12	0.0003
32	6	0.19	0.0003
34	44	0.09	0.0003
48	95	0.21	0.0005
50	10	0.16	0.0004
52	40	0.21	0.0005
54	29	0.14	0.0005
64	50	0.14	0.0003
66	13	0.09	0.0003

Cruise 3

Station	Depth (fathom)	Percent P_2O_5	Percent U
2	21	0.09	0.0002
3	750	0.13	0.0003
5	1500	0.12	0.0002
6	1650	0.12	0.0003
7	1700	0.12	0.0002
8	1720	0.17	0.0002
10	102	0.10	0.0002
12	25	0.11	0.0002
13	11	0.03	0.0002
15	15	0.09	0.0002
16	110	0.12	0.0002
17	37	0.12	0.0002
21	118	0.09	0.0001
25	98	0.12	0.0002
26	70	0.12	0.0002

The results are included in the tables of this report.

The outstanding features in this respect are two: the predominance of low values as compared to estuarial or marsh waters, and the high degree of variability. The variability alone gives these determinations their significance because they reflect the lack of uniformity in the distribution of the loci of biotic activity in the Gulf of Mexico. This is consistent with the recognized heterogeneous distribution of plankton elements. There is a tendency for the concentrations of the compounds found in closely spaced samples to conform to the concept of contagiously distributed populations of plankton as described by Barnes and Marshall (1951).

Table 2.--Uranium content of some water samples collected on Alaska cruises 1 and 3.

Cruise 1

Station	Depth m.	Percent uranium
7	Surface	2.9×10^{-7}
	200	2.6×10^{-7}
	600	2.3×10^{-7}
	1800	2.6×10^{-7}
43	Surface	2.2×10^{-7}
	165	2.3×10^{-7}
	335	2.6×10^{-7}
	500	2.0×10^{-7}
	640	2.8×10^{-7}

Cruise 3

Station	Depth m.	Percent uranium
8	Surface	2.7×10^{-7}
	500	2.8×10^{-7}
	1300	2.6×10^{-7}
	2200	3.0×10^{-7}
	2900	3.1×10^{-7}
37	Surface	2.9×10^{-7}
	5	2.7×10^{-7}
	15	2.6×10^{-7}

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SOME ASPECTS OF THE PHYSICAL OCEANOGRAPHY OF THE GULF OF MEXICO

(Based on data collected on the cruises of the ALASKA)

By

Kenneth H. Drummond
and
George B. Austin, Jr.

Temperature. A large number of sea surface temperature observations have been collected in the Gulf of Mexico. Probably the sea surface temperature values most referred to in this area are those of Fuglister (1947). These are mean isotherms and show variation from month to month. The main feature of the average winter pattern is a gradual decrease from approximately 75° F. (23.9° C.) in the south to 65° F. (18.3° C.) in the north for all parts of the Gulf. The gradient is larger in the eastern portion. In the summer the average temperatures approach uniformity at 84° F. (28.9° C.) throughout the region. However, measurements made during the cruises of the ALASKA indicate that considerable deviation from these average isotherms may occur at certain times. For example, in August the mean charts show a temperature of 84° F. (28.9° C.) throughout the Gulf whereas ALASKA data show variations from 85° F. (29.4° C.) to 89° F. (31.7° C.) for the northeastern portion of the Gulf.

Temperature-depth sections (surface to 1000 meters) for the first three cruises of the ALASKA are presented pictorially in figure 1. Station positions and cruise lines for each of the cruises are incorporated into the illustration to assist in orienting the temperature-depth sections. A scale of depths in 100-meter intervals and a key to the temperature ranges are given in the legend. Temperature-depth sections for the shallow continental shelf areas are omitted and the omission is indicated by the dashed cruise lines (i.e. western Gulf and northwestern Gulf).

Histograms showing frequency of the distribution of temperature and salinity at various depths greater than 800 meters for cruises 1-1A, 2-2B, and 3-1C are presented in figure 2.

Salinity. Until a systematic oceanographic survey of the Gulf was made by the ALASKA even fewer data than those of temperature were available on surface salinities. Parr (1935) prepared a chart of the distribution of average salinities for the upper 50 meters. This chart shows a range of 36.00 °/oo to 36.25 °/oo for the Gulf region. More recent data on sea surface salinities obtained on the ALASKA cruises are presented in figures 3 through 8. Data from cruise 8-3C lacked continuity between station lines in both space and time and were therefore omitted.

Histograms showing the frequency of the distribution of salinity and temperature at various depths from 800 meters to 2,000 meters are presented in figure 2.

Depth of Motionless Layers. A study of the depth of the motionless layer in the Gulf of Mexico was made by Adams (1954) using the methods of Defant and Hidaka. Data used in this study were obtained on cruises 1-1A, 2-1B and 3-1C of the ALASKA. Excerpts from Mr. Adams' report are as follows:

> "A comparison of the results of the methods is of interest. It will be noted that with Defant's method (see figure 10), two maxima are obtained, one in the western Gulf and one in the east central Gulf. These maxima also appear in Hidaka's method but both are of different magnitudes. The western Gulf maximum in figure 10 is found to the southeast using Hidaka's method with the latter being about 300 m. greater than the former. The east central maximum in figure 10 is again displaced to the southeast using Hidaka's method, but in this case the latter is about 600 m. smaller than the former. Both methods show a variation in depth of the motionless layer of from 200 to greater than 1,000 m. Moreover, the methods show good agreement in the area of Yucatan Channel and fair agreement in the Straits of Florida."

Currents. The cruises of the research vessel ALASKA provided the first complete coverage of the Gulf of Mexico with information needed to compute the deep water currents. It was on the basis of these current patterns that sufficient evidence was acquired to point out the existence of a large-scale, semi-permanent, anti-cyclonic eddy in the eastern Gulf.

The results of contouring the dynamic heights of cruises 1-1A, 2-1B, and 3-1C are illustrated in figures 11 and 12. They show a small intense eddy approximately 100 miles to the northeast of the Yucatan Channel. It may also be observed that the Yucatan current flows a considerable distance to the northwest (300 miles) before turning south and east and departing through the Florida Straits. A second, less intense, anti-cyclonic eddy is pictured approximately 100 miles off Pensacola, Florida. Each of the two eddies described above is a consequence of the combined analysis of two cruises taken several weeks apart and consisting of only a small number of stations. Therefore, the resulting composite analysis may lack detail and continuity in time and space.

Cruise 4-2A (in the winter of 1952), graphically shows for the first time the existence of a large-scale, anti-cyclonic eddy centered at 86° 36' West longitude and 26° 00' North latitude. See figure 13 for the surface current pattern. The analysis here is likely to be more indicative of a synoptic current pattern inasmuch as the period of the cruise in the region of the eddy was about two weeks. It should also be noted that the eddy shown in figure 13 is somewhat obscured in figures 11 and 12 by the contouring of dynamic height data from two separate cruises (cruises 1-1A and 3-1C).

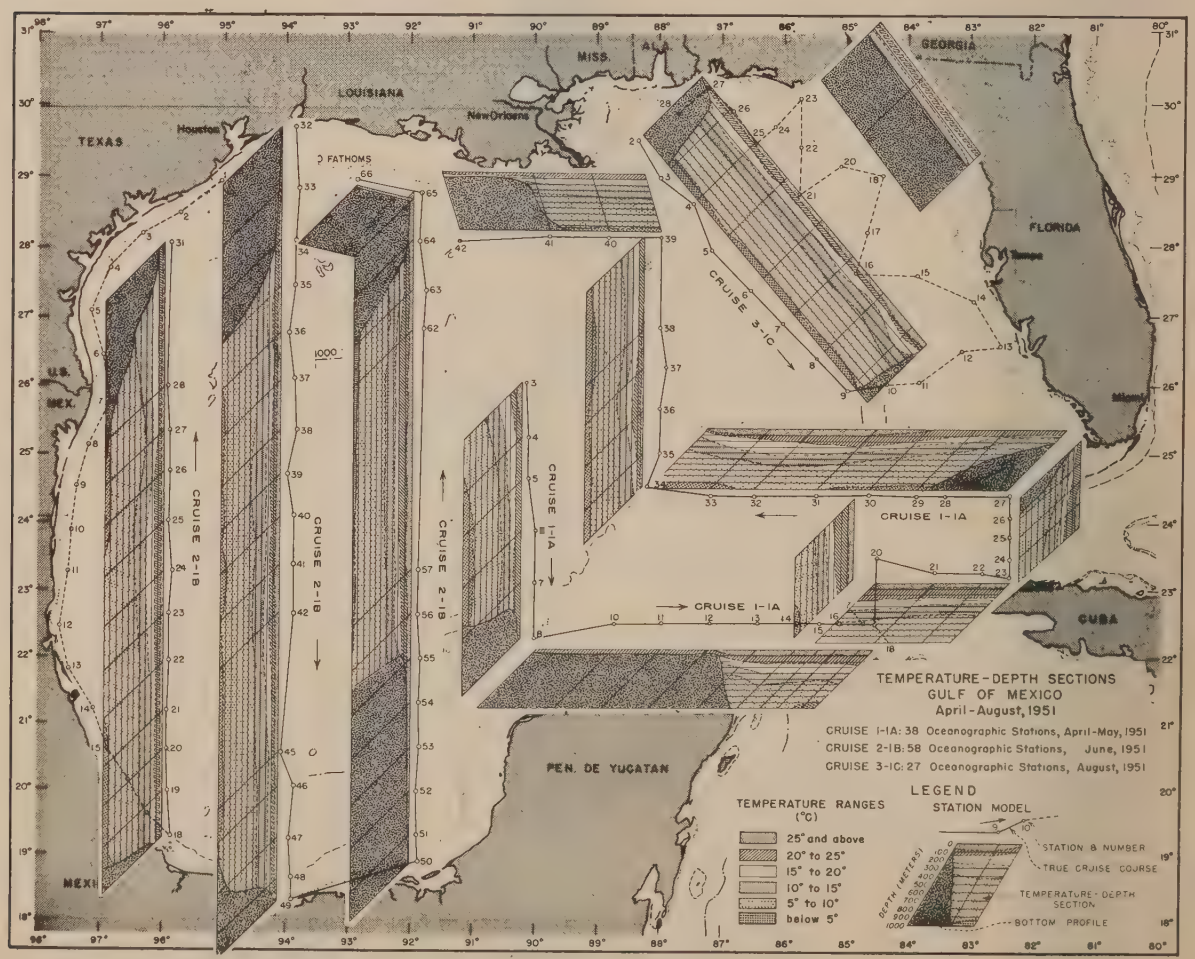

Figure 1.

Cruise 5-2C (in the summer of 1952) also displays, from analysis of dynamic height data, a large, anti-cyclonic eddy in the same region (figure 14).

On the basis of the comparison of the three sets of dynamic height data from the eastern Gulf of Mexico, cruise 54-10 of the A. A. JAKKULA was designed to investigate the region with emphasis on the movements of the eddy currents. Preliminary analysis of these data has also shown the same well-defined eddy but it is somewhat larger in size.

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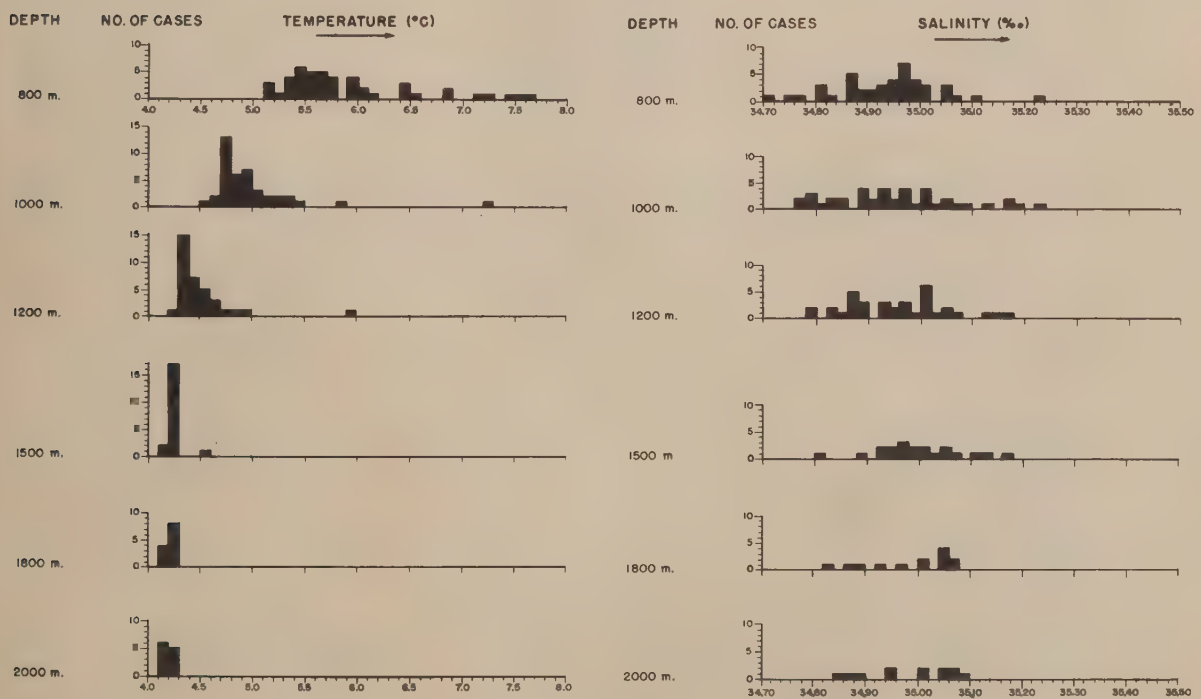

Figure 2.--Frequency distribution of temperatures and salinities at various depths.

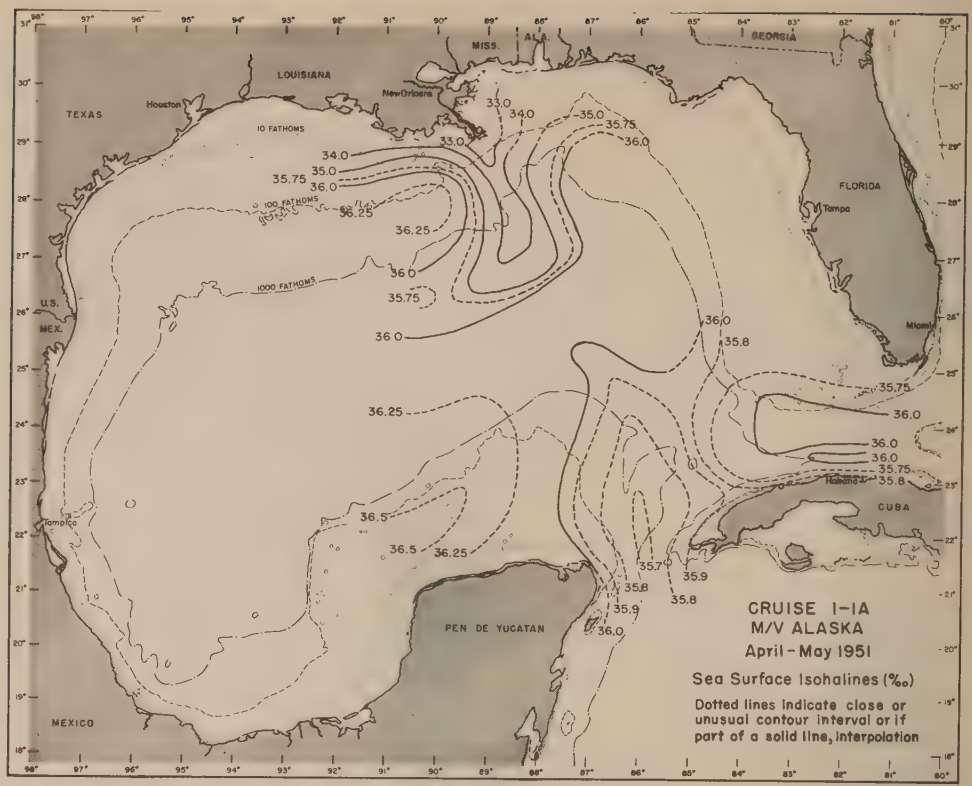

FIGURE 3

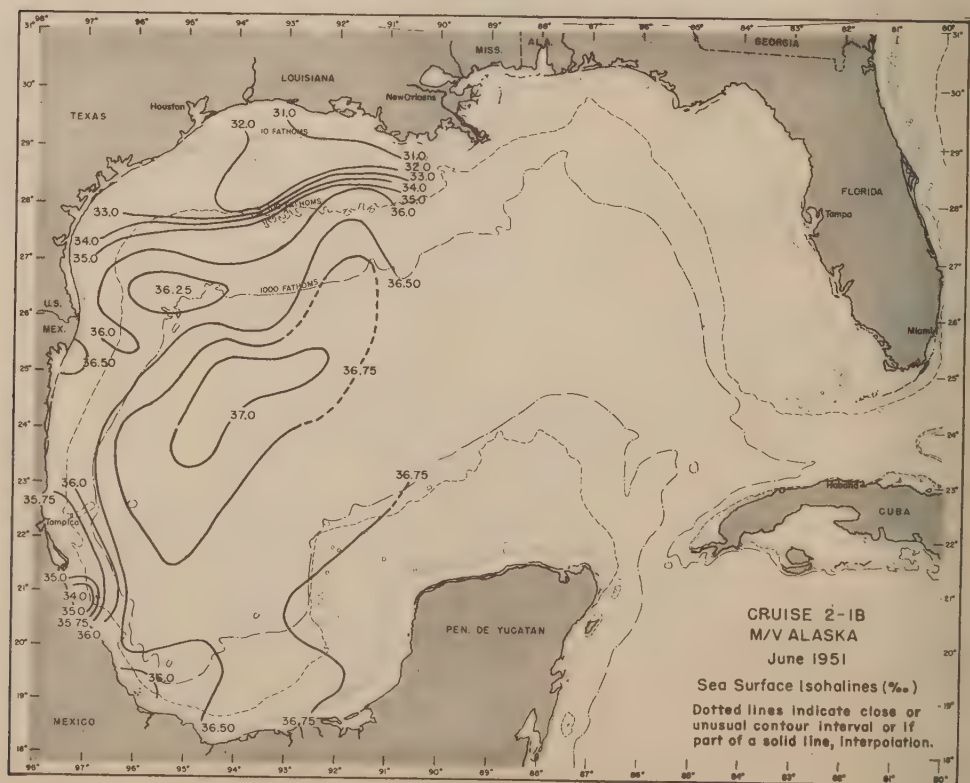

FIGURE 4

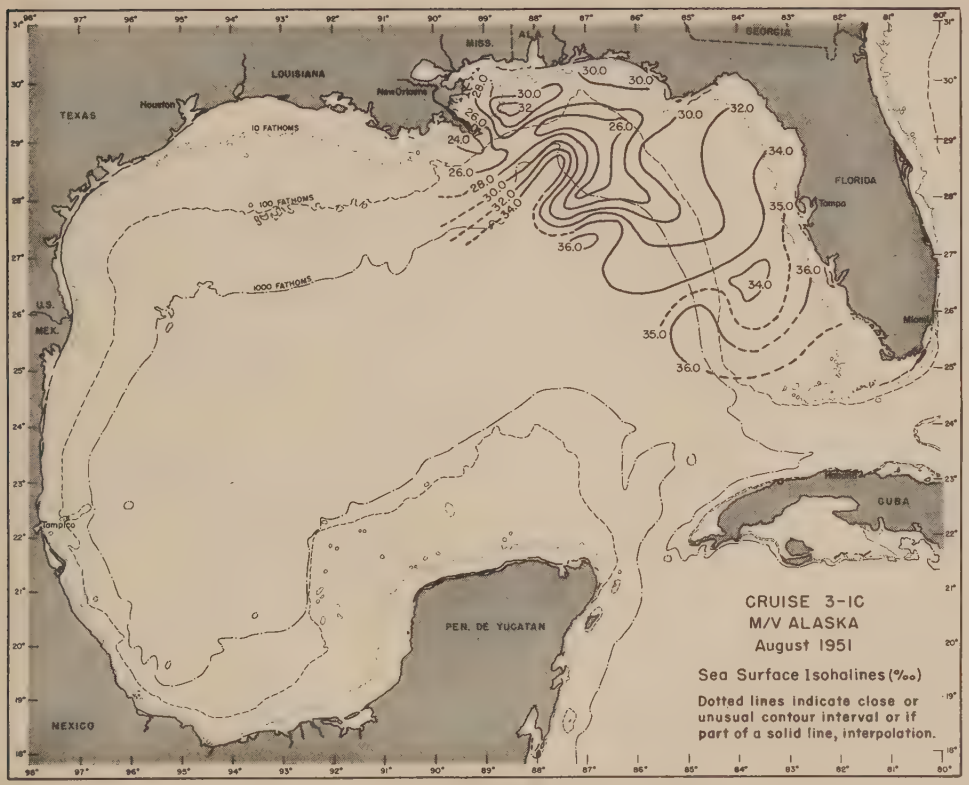

FIGURE 5

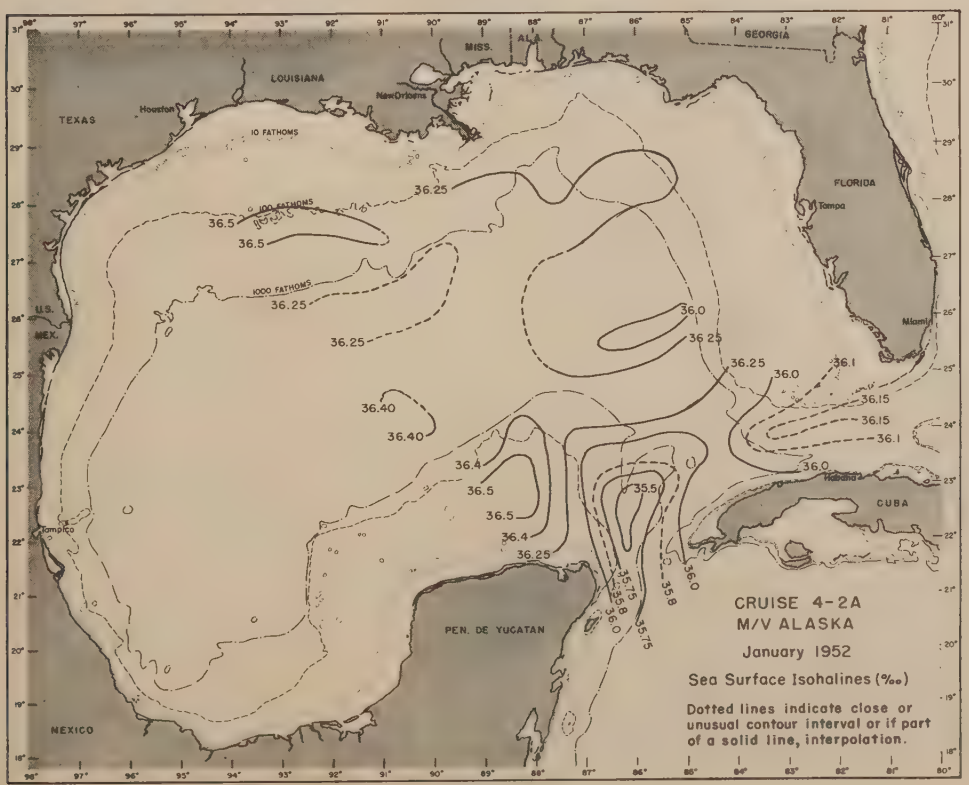

FIGURE 6

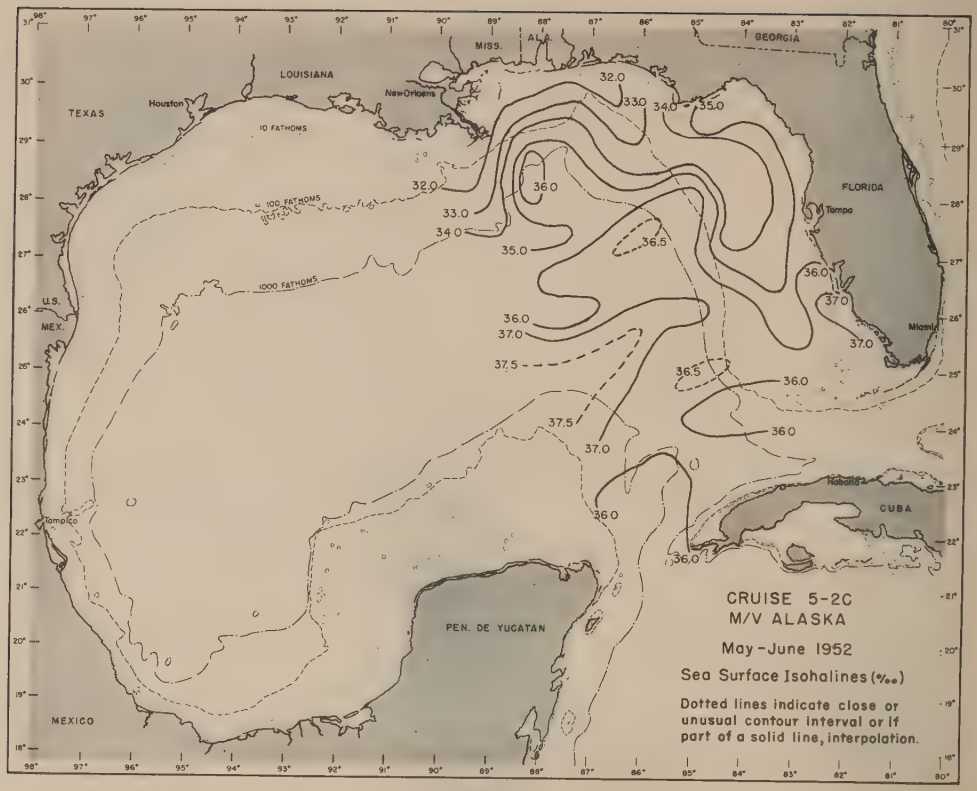

FIGURE 7

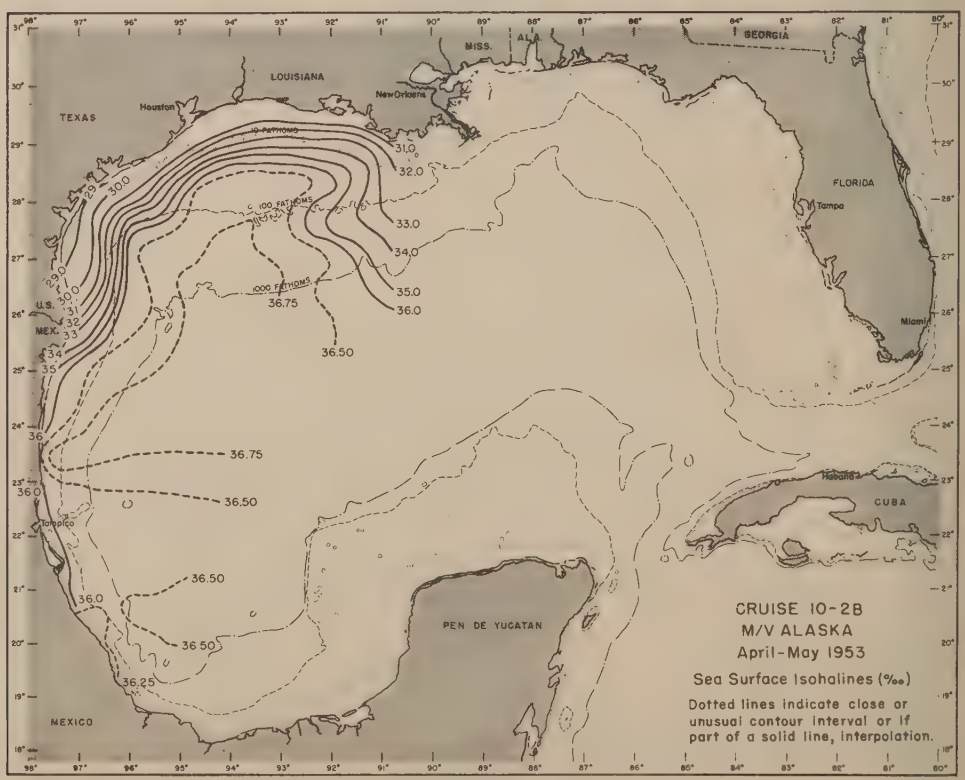

FIGURE 8

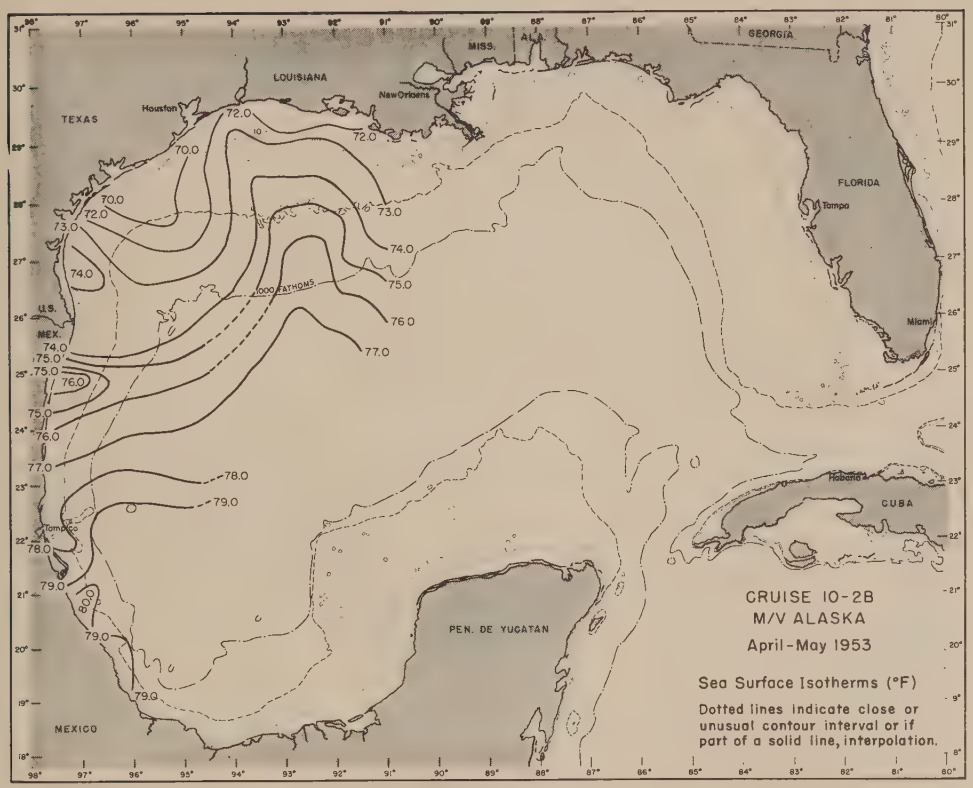

FIGURE 9

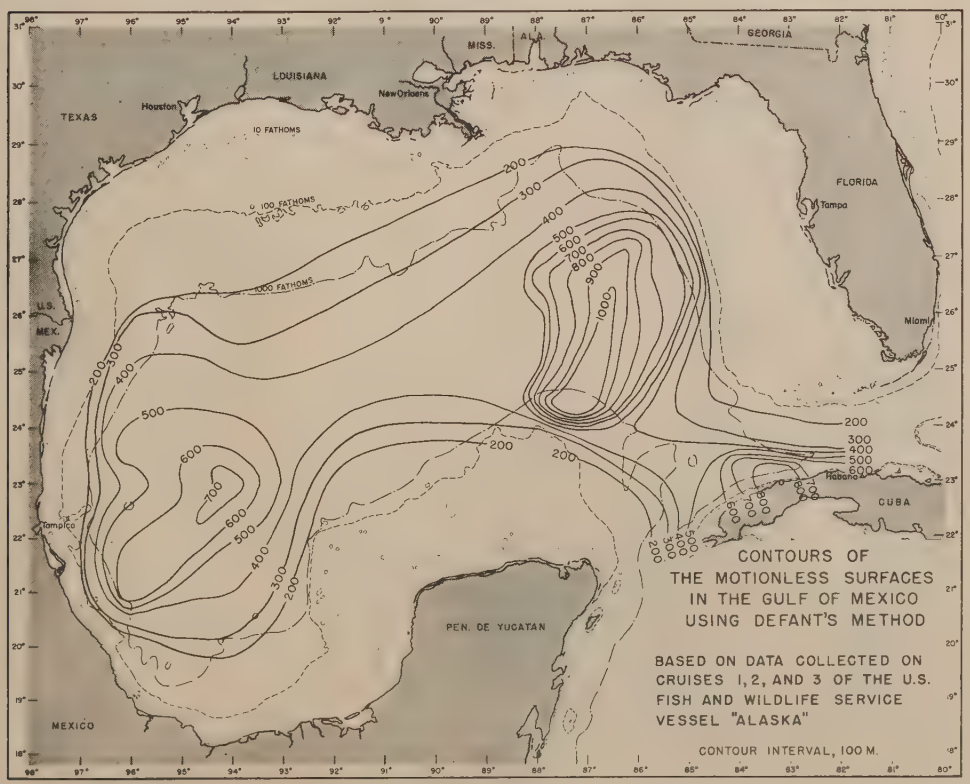

FIGURE 10

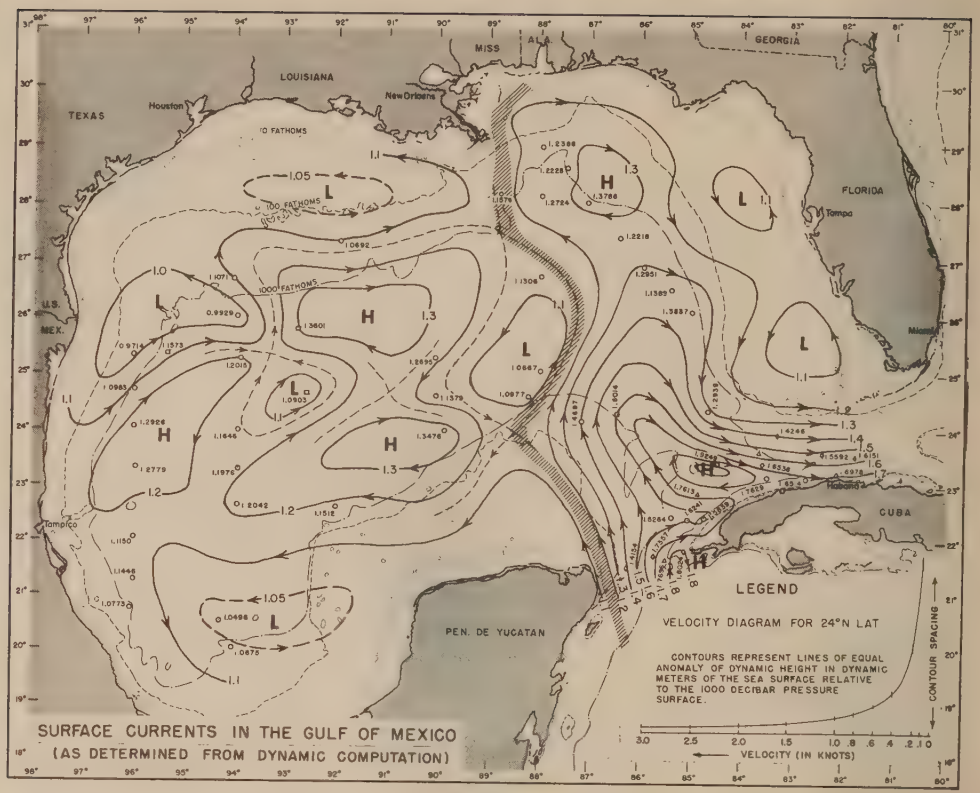

FIGURE 11

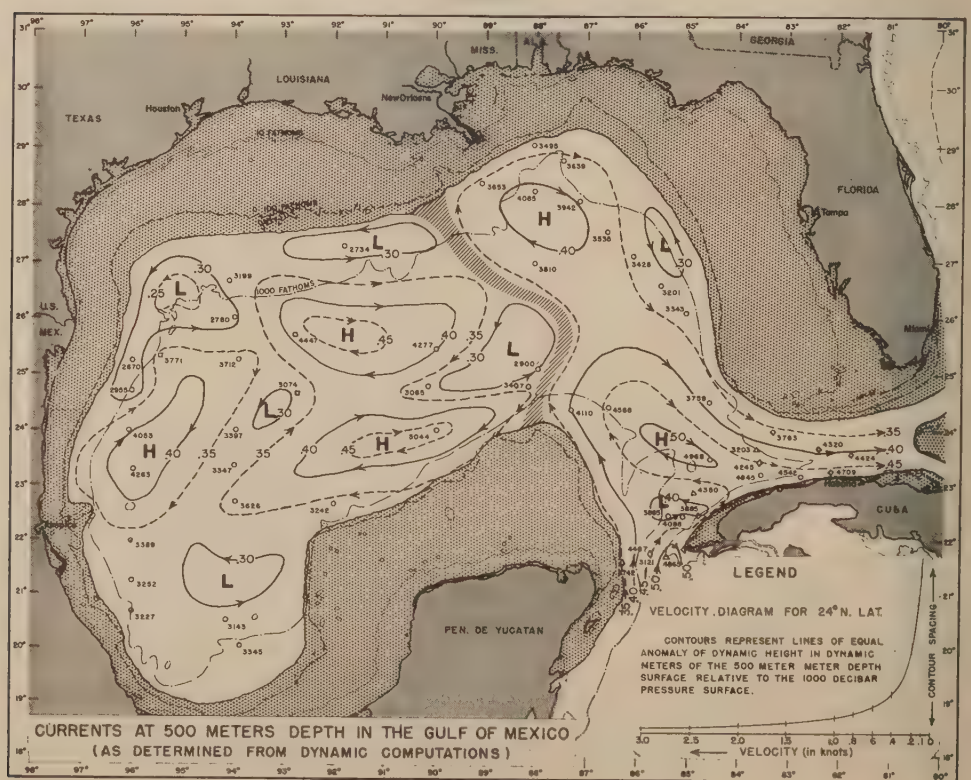

FIGURE 12

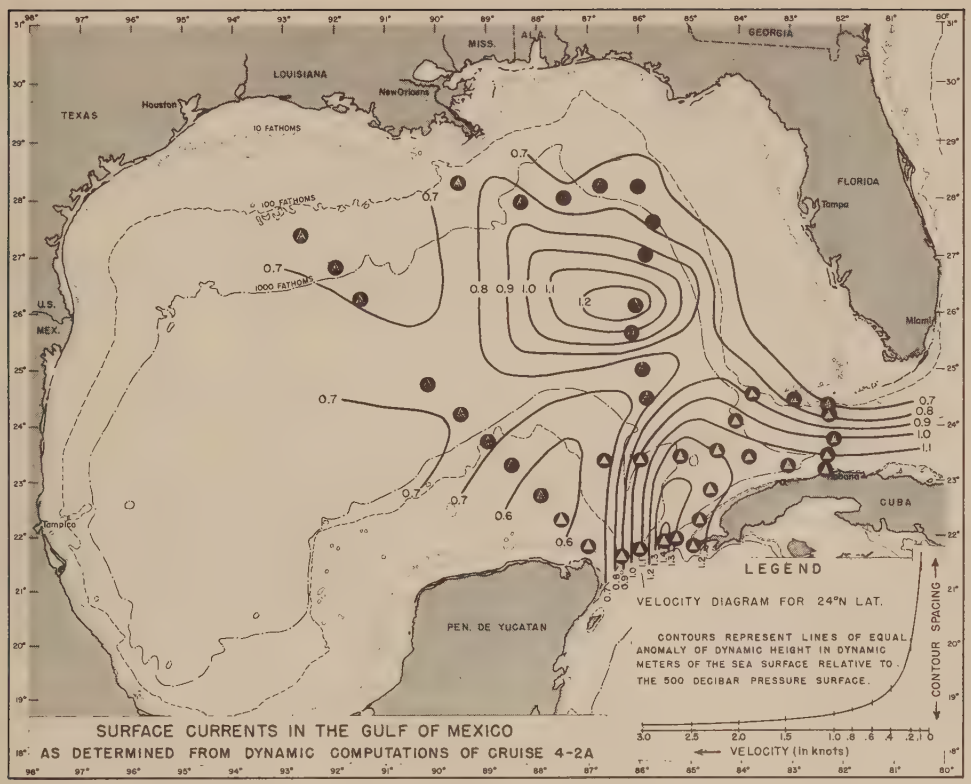

FIGURE 13

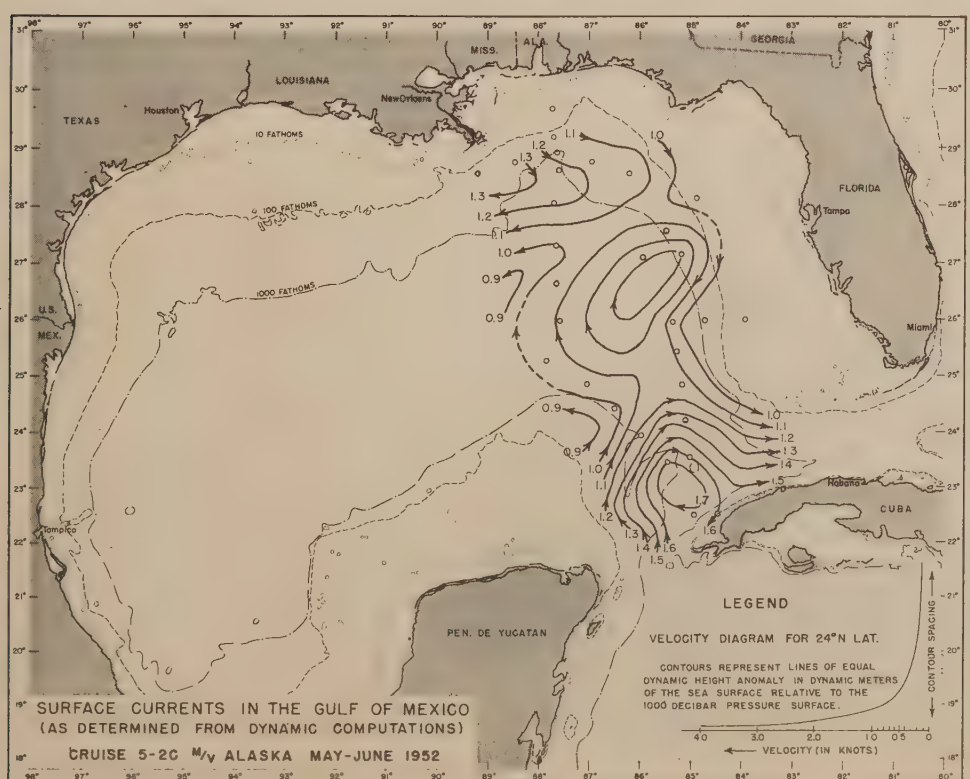

FIGURE 14

Notes Concerning the Tables.

Cruise and station numbers: In the following tables the station designation has three terms. The first term is a serial number applied to all cruises of ALASKA regardless of locale. The second term applies to the three basic cruise areas worked out for the specific hydrographic studies in cooperation with Texas A. and M. Department of Oceanography. These areas were designated A, B, and C. The numbers immediately preceding a given letter indicate serially the cruises in that particular area. The third term is the serial number of the station as occupied on any given cruise. Thus Station 4-2A-29 was the twenth-ninth station occupied on the second cruise in area "A". The first term, 4, indicates that this was the fourth cruise of ALASKA while she was stationed at Galveston.

There were a number of special cruises not related to the basic plan for the study of the Gulf of Mexico which were assigned serial numbers in regular order. It is for this reason that cruises 6, 7, and 9 do not appear in these tables.

Depth: in meters (1 fathom = 1.8285 meters).

Temperature: degrees Centigrade.

Salinity: parts per thousand, converted from chloride content according to Knudsen's tables.

Sigma-t (σt): Derived from computed relationships between density (Mass per unit volume) and the specific volume of given samples of sea water in their places of origin (in situ), LaFond (1951). $\sigma_{s,t,p} = 1{,}000 (\rho_{s,t,p} - 1)$, where ρ = density, s = salinity °/oo, t = temperature (°C.), and p = pressure (decibars). This definition refers to the density at the pressure at which the sample was collected. The same expression for pressure = 0 (surface) is $\sigma_{s,t,o} = 1{,}000 (\rho_{s,t,o} - 1)$. $\sigma_{s,t,o}$ is commonly shortened to σ_t and provides an index number for the density of a given sample at the sea surface and for a given salinity and temperature. Thus a density ($\rho_{s,t,o}$) of 1.02567 is converted by definition to a σ_t of 25.67 [$\sigma_t = 1{,}000(1.02567 - 1)$]. Sigma-t ($\sigma_t$)) can be determined from salinity and temperature by the use of graphs or tables (LaFond, 1951).

Total phosphorus (Total PO_4-P): microgram-atoms per liter of phosphate phosphorus. The final colorimetric determination is made as phosphate phosphorus after digestion.

Inorganic phosphorus (Inorg. PO_4-P): Inorganic phosphorus as phosphate phosphorus, undigested samples, in microgram-atoms per liter.

Nitrate-nitrite (NO_3-N): Nitrate-nitrite nitrogen in microgram-atoms of nitrogen per liter.

Carbohydrates (Carb. Mg./l): As arabinose equivalents in milligrams per liter. The general term carbohydrates should be used because there may be several pentoses or hexoses involved. Arabinose is used as a standard for comparison during the analytical process. Undoubtedly these carbohydrate materials are present in the form of monosaccharides, oligosaccharides, and polysaccharides.

Protein (Prot. Mg./l): Given in terms of tyrosine in milligrams per liter. The tyrosine may represent any number of known and unknown specific proteinaceous materials, and is used as a standard because of the adaptability of the analytical method to sea water.

Table 3.--Water color (Forel scale)

Code	Description
00	Deep blue
10	Blue
20	Green blue
30	Blue green
40	Green
50	Light green
60	Yellowish green
70	Yellow green
80	Green yellow
90	Greenish yellow
99	Yellow

TABLE 4. NUMERICAL WEATHER CODES—PRESENT WEATHER

00 Cloud development NOT observed or NOT observable during past hour.	**01** Clouds generally dissolving or becoming less developed during past hour.	**02** State of sky on the whole unchanged during past hour.	**03** Clouds generally forming or developing during past hour.	**04** Visibility reduced by smoke.	**05** Haze.	**06** Widespread dust in suspension in the air, NOT raised by wind, at time of observation.	**07** Dust or sand raised by wind, at time of observation.	**08** Well developed dust devil(s) within past hour.	**09** Duststorm or sandstorm within sight of or at station during past hour.
10 Light fog.	**11** Patches of shallow fog at station, NOT deeper than 6 feet on land.	**12** More or less continuous shallow fog at station, NOT deeper than 6 feet on land.	**13** Lightning visible, no thunder heard.	**14** Precipitation within sight, but NOT reaching the ground.	**15** Precipitation within sight, reaching the ground, but distant from station.	**16** Precipitation within sight, reaching the ground, near to but NOT at station.	**17** Thunder heard, but no precipitation at the station.	**18** Squall(s) within sight during past hour.	**19** Funnel cloud(s) within sight during past hour.
20 Drizzle (NOT freezing and NOT falling as showers) during past hour, but NOT at time of ob.	**21** Rain (NOT freezing and NOT falling as showers) during past hour, but NOT at time of ob.	**22** Snow (NOT falling as showers) during past hour, but NOT at time of observation.	**23** Rain and snow (NOT falling as showers) during past hour, but NOT at time of observation.	**24** Freezing drizzle or freezing rain (NOT falling as showers) during past hour, but NOT at time of observation.	**25** Showers of rain during past hour, but NOT at time of observation.	**26** Showers of snow, or of rain and snow, during past hour, but NOT at time of observation.	**27** Showers of hail, or of hail and rain, during past hour, but NOT at time of observation.	**28** Fog during past hour, but NOT at time of observation.	**29** Thunderstorm (with or without precipitation) during past hour, but NOT at time of observation.
30 Slight or moderate duststorm or sandstorm has decreased during past hour.	**31** Slight or moderate duststorm or sandstorm no appreciable change during past hour.	**32** Slight or moderate duststorm or sandstorm has increased during past hour.	**33** Severe duststorm or sandstorm, has decreased during past hour.	**34** Severe duststorm or sandstorm, no appreciable change during past hour.	**35** Severe duststorm or sandstorm, has increased during past hour.	**36** Slight or moderate drifting snow, generally low.	**37** Heavy drifting snow, generally low.	**38** Slight or moderate drifting snow, generally high.	**39** Heavy drifting snow, generally high.
40 Fog at distance at time of observation, but NOT at station during past hour.	**41** Fog in patches.	**42** Fog, sky discernible, has become thinner during past hour.	**43** Fog, sky NOT discernible, has become thinner during past hour.	**44** Fog, sky discernible, no appreciable change during past hour.	**45** Fog, sky NOT discernible no appreciable change during past hour.	**46** Fog, sky discernible, has begun or become thicker during past hour.	**47** Fog, sky NOT discernible, has begun or become thicker during past hour.	**48** Fog, depositing rime, sky discernible.	**49** Fog, depositing rime, sky not discernible.
50 Intermittent drizzle (NOT freezing) slight at time of observation.	**51** Continuous drizzle (NOT freezing) slight at time of observation.	**52** Intermittent drizzle (NOT freezing) moderate at time of ob.	**53** Continuous drizzle (NOT freezing), moderate at time of ob.	**54** Intermittent drizzle (NOT freezing), thick at time of observation.	**55** Continuous drizzle (NOT freezing), thick at time of observation.	**56** Slight freezing drizzle.	**57** Moderate or thick freezing drizzle.	**58** Drizzle and rain, slight.	**59** Drizzle and rain, moderate or heavy.
60 Intermittent rain (NOT freezing), slight at time of observation.	**61** Continuous rain (NOT freezing), slight at time of observation.	**62** Intermittent rain (NOT freezing), moderate at time of ob.	**63** Continuous rain (NOT freezing), moderate at time of observation.	**64** Intermittent rain (NOT freezing), heavy at time of observation.	**65** Continuous rain (NOT freezing), heavy at time of observation.	**66** Slight freezing rain.	**67** Moderate or heavy freezing rain.	**68** Rain or drizzle and snow, slight.	**69** Rain or drizzle and snow, moderate or heavy.
70 Intermittent fall of snowflakes, slight at time of observation.	**71** Continuous fall of snowflakes, slight at time of observation.	**72** Intermittent fall of snowflakes, moderate at time of observation.	**73** Continuous fall of snowflakes, moderate at time of observation.	**74** Intermittent fall of snowflakes, heavy at time of observation.	**75** Continuous fall of snowflakes, heavy at time of observation.	**76** Ice needles (with or without fog).	**77** Granular snow (with or without fog).	**78** Isolated starlike snow crystals (with or without fog).	**79** Ice pellets (sleet, U. S. definition).
80 Slight rain shower(s).	**81** Moderate or heavy rain shower(s).	**82** Violent rain shower(s).	**83** Slight shower(s) of rain and snow mixed.	**84** Moderate or heavy shower(s) of rain and snow mixed.	**85** Slight snow shower(s).	**86** Moderate or heavy snow shower(s).	**87** Slight shower(s) of soft or small hail with or without rain or rain and snow mixed.	**88** Moderate or heavy shower(s) of soft or small hail with or without rain or rain and snow mixed.	**89** Slight shower(s) of hail, with or without rain or rain and snow mixed, not associated with thunder.
90 Moderate or heavy shower(s) of hail, with or without rain or rain and snow mixed, not associated with thunder.	**91** Slight rain at time of ob.; thunderstorm during past hour, but NOT at time of observation.	**92** Moderate or heavy rain at time of ob.; thunderstorm during past hour, but NOT at time of observation.	**93** Slight snow or rain and snow mixed or hail at time of observation.; thunderstorm during past hour, but not at time of observations.	**94** Mod. or heavy snow, or rain and snow mixed or hail at time of ob.; thunderstorm during past hour, but NOT at time of observation.	**95** Slight or mod. thunderstorm without hail, but with rain and/or snow at time of observation.	**96** Slight or moderate thunderstorm, with hail at time of observation.	**97** Heavy thunderstorm, without hail, but with rain and/or snow at time of observation.	**98** Thunderstorm combined with duststorm or sandstorm at time of observation.	**99** Heavy thunderstorm with hail at time of observation.

Table 5.--Sea amount

Code	Approximate height (feet)	Description
0	---	Calm
1	Less than 1	Smooth
2	1 to 3	Slight
3	3 to 5	Moderate
4	5 to 8	Rough
5	8 to 12	Very rough
6	12 to 20	High
7	20 to 40	Very high
8	40 and over	Mountainous
9	---	Very rough confused sea

Table 6.--Cloud symbols and code for degree of cloud coverage

Symbol	Cloud type	Code No.	Tenths of sky covered
Ci	Cirrus	0	None
Cc	Cirrocumulus	1	1
Cs	Cirrostratus	2	2
Ac	Altocumulus	3	3
As	Altostratus	4	4
Sc	Stratocumulus	5	5
St	Stratus	6	6
Ns	Nimbostratus	7	7
Cu	Cumulus	8	8
Cb	Cumulonimbus	9	9
		10	10

Table 7.--Wind speed (Beaufort scale)

Code	Speed	Description
00	Less than 1 knot	Calm
01	1 - 3 knots	Light airs
02	4 - 6 knots	Light breeze
03	7 - 10 knots	Gentle breeze
04	11 - 16 knots	Moderate breeze
05	17 - 21 knots	Fresh breeze
06	22 - 27 knots	Strong breeze
07	28 - 33 knots	Moderate gale
08	34 - 40 knots	Fresh gale
09	41 - 47 knots	Strong gale
10	48 - 55 knots	Whole gale
11	56 - 63 knots	Storm
12	64 knots and above	Hurricane

Table 8.--Visibility

Code	Description	Distance
0	Dense fog	50 yards
1	Thick fog	200 yards
2	Fog	400 yards
3	Moderate fog	1000 yards
4	Thin fog or mist	1 mile
5	Visibility poor	2 miles
6	Visibility moderate	5 miles
7	Visibility good	10 miles
8	Visibility very good	30 miles
9	Visibility excellent	over 30 miles

Notes on Cruises 1 through 3

It will be noticed that samples for organic determinations were taken at three levels at alternate stations, and that total phosphorus was not included. These early collections were made to determine the feasibility of freezing the samples at sea with subsequent analyses being made ashore after a cruise was completed. During these early cruises we were also short of personnel and it would have been impossible to analyze full complements of samples as in the later cruises.

Note on Cruise 1

The carbohydrate values for Cruise 1 at the deeper levels are almost all indicated as "green". This means that the reacted samples were green to the eye instead of the normal reddish-purple. However, the filters used in the photometer prevented the measurement of the light transmitted in the green portion of the spectrum, hence some green values are given as zero carbohydrates. The fact that the green response all but disappeared in the later analyses would indicate that an unknown technical difficulty caused the reaction to yield green. The values are included for the sake of completeness, and because, in spite of the discoloration, I feel that they are still representative of some measurable component present in the sea water. The existence of values of similar magnitudes in the deeper levels at stations occupied during the later cruises supports this contention. There is a possibility that high nitrate-nitrites will cause a green reaction to N-ethyl carbazole reagent in the absence of carbohydrates.

Figure 15.--Locations of stations occupied on Cruise 1-1A.

STATION NO. 1-1A-3

DATE 22 4 1951 LAT. 26° 07' N. LONG. 90° 09' W.
Day Month Year
TIME 0502 DEPTH 1660 MAX. SAMPLE DEPTH 400 WIRE ANGLE 38 °
GCT Faths. Meters
WATER COLOR - Code WEATHER 02 Code SEA 4 Code SWELL 120 ° Direction T. 6 ft. Hgt.
5 sec. Period CLOUDS Cu Type 2 Amount TEMP. 78.0 °F. Dry 75.0 °F. Wet
BAR. 30.00 in. REL. HUM. 87 WIND 175 ° Direction T. 4 Force VIS. 8 Code

OBSERVED VALUES

Depth	Temp. °C.	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.60	35.84				
8	25.61	35.82	0.0	0.6	1.6	0.0
24	25.62	35.86				
46	25.57	35.82				
67	25.57	35.88				
86	25.62	35.84				
123	25.61	35.79				
158	23.16	36.65	0.1	3.8	0.1	2.3
234	---	36.53				
312	---	35.81				
400	14.99	35.79				
*1170	---	---	0.4	0.3	0	0.0

VALUES AT STANDARD DEPTHS

Depth	Temp. °C.	Sal. ‰	σ_t
0	25.60	35.84	23.81
10	25.61	35.82	23.79
20	25.62	35.82	23.79
30	25.59	35.82	23.80
50	25.57	35.82	23.81
75	25.57	35.84	23.82
100	25.61	35.85	23.82
150	23.60	36.60	24.99
200	20.05	36.69	26.05
250	18.11	36.60	26.49
300	16.57	35.90	26.32
400	14.99	35.79	26.60

*Uncorrected depth

STATION NO. 1-1A-4

DATE 22 4 1951 LAT. 25° 20' N. LONG. 90° 07' W.
Day Month Year

TIME 2108 DEPTH 1850 MAX. SAMPLE DEPTH 1306 WIRE ANGLE 23 °
GCT Faths. Meters

WATER COLOR - WEATHER 01 SEA 2 SWELL 150 ° T. 6 ft.
Code Code Code Direction Hgt.

6 sec. CLOUDS Cu 5 TEMP. 80.8 °F. 70.6 °F.
Period Type Amount Dry Wet

BAR. 30.00 in. REL. HUM. 61% WIND 180 ° T. 1 VIS. 8
Direction Force Code

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	24.99	36.08	0	24.99	36.08	24.18
9	24.59	36.02	10	24.59	36.02	24.26
27	23.57	36.24	20	23.85	36.06	24.51
54	22.15	36.78	30	22.90	36.27	24.94
80	21.28	36.82	50	22.17	36.77	25.53
105	20.44	36.71	75	21.35	36.82	25.80
156	18.43	36.49	100	20.50	36.76	25.99
205	17.22	36.36	150	18.70	36.51	26.27
305	14.07	35.81	200	17.40	36.37	26.49
402	11.20	35.37	250	15.55	36.10	26.71
504	9.24	35.08	300	14.15	35.83	26.81
605	8.81	35.08	400	11.35	35.39	27.03
864	5.35	34.79	500	9.30	35.09	27.16
1306	4.28	34.87	600	8.89	35.08	27.22
			700	7.73	34.88	27.24
			800	6.05	34.84	27.44
			1000	4.80	34.80	27.56
			1200	4.39	34.83	27.63

STATION NO. 1-1A-5

DATE 23 4 1951 LAT. 24° 40' N. LONG. 90° 07' W.
Day Month Year

TIME 1417 DEPTH 2000 MAX. SAMPLE DEPTH 1257 WIRE ANGLE 28 °
GCT Faths. Meters

WATER COLOR - Code WEATHER 01 Code SEA 1 Code SWELL 075 ° Direction T. 5 ft. Hgt.

7 sec. Period CLOUDS Cu Type 6 Amount TEMP. 77.6 °F. Dry 74.0 °F. Wet

BAR. 30.01 in. REL. HUM. 83% WIND 080 ° Direction T. 3 Force VIS. 8 Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.11	36.24				
13	24.23	36.13	0	1.3	0.4	0
30	23.59	36.47				
62	22.64	36.49				
90	21.07	36.35				
120	19.48	36.51				
179	16.23	36.08				
240	14.01	35.70				
358	10.49	35.19				
484	8.32	34.90				
736	5.91	35.23				
995	4.90	35.16	1.8	16.6	3.6[a]	1.6
1257	4.33	34.79				
* 2500	---	---	0.5	0.9	3.0	0

(a) green carbohydrates

* Uncorrected depth

STATION NO. 1-1A-5

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	24.11	36.24	24.57
10	24.25	36.15	24.46
20	23.90	36.14	24.55
30	23.59	36.47	24.90
50	22.95	36.50	25.10
75	21.90	36.41	25.34
100	20.70	36.38	25.64
150	17.70	36.39	26.43
200	15.40	35.92	26.61
250	13.60	35.63	26.78
300	11.98	35.40	26.92
400	9.65	35.07	27.09
500	8.09	34.91	27.21
600	6.99	35.06	27.49
700	6.12	35.21	27.72
800	5.60	35.22	27.80
1000	4.90	35.16	27.84
1200	4.65	34.87	27.63

STATION NO. 1-1A-6

DATE 23 4 1951 (Day Month Year) LAT. 24° 00' N. LONG. 90° 00' W.

TIME 2300 (GCT) DEPTH 1900 (Faths.) MAX. SAMPLE DEPTH 1292 (Meters) WIRE ANGLE 5 °

WATER COLOR - (Code) WEATHER 01 (Code) SEA 1 (Code) SWELL 075 ° (Direction) T. 4 ft. (Hgt.)

5 sec. (Period) CLOUDS Sc Cu (Type) 2 5 (Amount) TEMP. 77.6 °F. (Dry) 74.4 °F. (Wet)

BAR. 30.02 in. REL. HUM. 83 % WIND 080 ° (Direction) T. 1 (Force) VIS. 9 (Code)

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C.	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	24.39	36.26	0	24.39	36.26	24.50
13	24.12	36.35	10	24.10	36.32	24.63
29	23.34	36.44	20	23.64	36.39	24.82
63	22.65	36.56	30	23.34	36.46	24.96
92	21.90	36.53	50	22.87	36.53	25.15
124	20.27	36.35	75	22.38	36.56	25.31
182	15.89	36.02	100	21.38	36.48	25.53
241	12.88	35.52	150	18.60	36.16	26.03
355	9.65	35.05	200	14.70	35.92	26.76
483	7.82	34.67	250	12.45	35.46	26.88
1011	7.02	34.79	300	11.00	35.21	26.96
1292	5.23	34.83	400	8.83	34.87	27.06
			500	7.78	34.65	27.05
			600	7.45	34.63	27.08
			700	7.20	34.67	27.15
			800	7.10	34.71	27.20
			1000	7.02	34.78	27.26
			1200	5.98	34.82	27.43

STATION NO. 1-1A-7

DATE 24 4 1951 LAT. 23° 15' N. LONG. 90° 00' W.
Day Month Year
TIME 0749 DEPTH 420 MAX. SAMPLE DEPTH 296 WIRE ANGLE 8 °
GCT Faths. Meters
WATER COLOR - WEATHER 01 SEA 2 SWELL --- ° T. 4 ft.
Code Code Code Direction Hgt.
6 sec. CLOUDS Cu 2 TEMP. 76.6 °F. 73.5 °F.
Period Type Amount Dry Wet
BAR. 30.02 in. REL. HUM. 87% WIND 045 ° T. 2 VIS. 8
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.65	36.27	0.1	0.5	0	1.2
10	24.47	36.36				
25	24.28	36.40				
50	23.66	36.45				
75	22.93	36.49				
99	22.15	36.47				
148	18.10	36.11				
198	14.64	35.90	1.1	12.2	1.1	0
296	12.01	35.50				
*400	---	---	0.6	13.4	0[a]	0

(a) green carbohydrates
*Uncorrected depth

VALUES AT STANDARD DEPTHS

Depth	Temp. °C.	Sal. ‰	σ_t
0	24.65	36.27	24.43
10	24.47	36.35	24.54
20	24.33	36.39	24.61
30	24.12	36.41	24.69
50	23.66	36.45	24.86
75	22.93	36.49	25.10
100	22.15	36.47	25.31
150	17.67	36.11	26.22
200	14.55	35.90	26.78
250	13.14	35.67	26.90
300	11.97	35.49	26.99

STATION NO. 1-1A-8

DATE 24 4 1951 (Day Month Year) LAT. 22° 25' N. LONG. 90° 00' W.
TIME 1608 (GCT) DEPTH 28 (Faths.) MAX. SAMPLE DEPTH 50 (Meters) WIRE ANGLE 5 °
WATER COLOR - (Code) WEATHER 01 (Code) SEA 2 (Code) SWELL 060 ° T. (Direction) 4 ft. (Hgt.)
5 sec. (Period) CLOUDS Cu (Type) 2 (Amount) TEMP. 80.0 °F. (Dry) 75.6 °F. (Wet)
BAR. 30.05 in. REL. HUM. 81 % WIND 060 ° T. (Direction) 2 (Force) VIS. 9 (Code)

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C.	Sal. ‰	Depth	Temp. °C.	Sal. ‰	σ_t
0	24.58	36.51	0	24.58	36.51	24.63
10	24.53	36.51	10	24.53	36.51	24.65
25	24.29	36.62	20	24.38	36.62	24.77
50	23.64	36.51	30	24.11	36.62	24.85
			50	23.64	36.51	24.91

STATION NO. 1-1A-10

DATE 25 4 1951 LAT. 22° 30' N. LONG. 88° 46' W.
Day Month Year
TIME 1826 DEPTH 29 MAX. SAMPLE DEPTH 40 WIRE ANGLE 8 °
GCT Faths. Meters
WATER COLOR - WEATHER 00 SEA 2 SWELL -- ° T. 6 ft.
Code Code Code Direction Hgt.
6 sec. CLOUDS -- -- TEMP. 80.0 °F. 75.1 °F.
Period Type Amount Dry Wet
BAR. 30.00 in. REL. HUM. 79% WIND 080 ° T. 3 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.38	36.26	1.4	0.6	8.3	0.0
5	24.25	36.26				
20	23.70	36.26	0.1	0.8	5.2	0.0
40	22.03	36.35	0.0	0.9	7.7	0.0

VALUES AT STANDARD DEPTHS

Depth	Temp. °C.	Sal. ‰	σ_t
0	24.38	36.26	24.50
10	24.11	36.26	24.58
20	23.70	36.26	24.70
30	23.05	36.29	24.92

STATION NO. 1-1A-11

DATE 26 4 1951 LAT. 22° 30' N. LONG. 88° 00' W.
Day Month Year
TIME 0310 DEPTH 25 MAX. SAMPLE DEPTH 34 WIRE ANGLE 12 °
GCT Faths. Meters
WATER COLOR - WEATHER 00 SEA 2 SWELL 080 ° T. 5 ft.
Code Code Code Direction Hgt.
4 sec. CLOUDS -- -- TEMP. 77.0 °F. 74.0 °F.
Period Type Amount Dry Wet
BAR. 30.01 in. REL. HUM. 87% WIND 090 ° T. 4 VIS. 8
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C.	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.52	36.29	3.6	0.5	2.0	0.0
10	24.52	36.27				
24	22.88	36.17	0.1	0.4	0.1	0.0
34	21.75	36.24	1.4	0.6	3.6	0.0

VALUES AT STANDARD DEPTHS

Depth	Temp. °C.	Sal. ‰	σ_t
0	24.52	36.29	24.48
10	24.52	36.27	24.47
20	23.60	36.18	24.67
30	22.25	36.18	25.06

STATION NO. 1-1A-12

DATE 26 4 1951 LAT. 22° 30' N. LONG. 87° 14' W.
Day Month Year
TIME 1235 DEPTH 25 MAX. SAMPLE DEPTH 30 WIRE ANGLE 3 °
GCT Faths. Meters
WATER COLOR - WEATHER 01 SEA 2 SWELL 090 ° T. 5 ft.
Code Code Code Direction Hgt.
5 sec. CLOUDS Sc Cu 1 2 TEMP. 77.5 °F. 73.9 °F.
Period Type Amount Dry Wet
BAR. 30.29 in. REL. HUM. 85 % WIND 090 ° T. 3 VIS. 8
Direction Force Code

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C.	Sal. ‰	Depth	Temp. °C.	Sal. ‰	σ_t
0	24.23	35.88	0	24.23	35.88	24.26
10	23.73	36.13	10	23.73	36.13	24.60
30	20.63	36.11	20	21.45	36.12	25.24
			30	20.63	36.11	25.46

STATION NO. 1-1A-13

DATE 26 4 1951 LAT. 22° 30' N. LONG. 86° 25' W.
Day Month Year

TIME 1935 DEPTH 300 MAX. SAMPLE DEPTH 426 WIRE ANGLE 23 °
GCT Faths. Meters

WATER COLOR - WEATHER 01 SEA 2 SWELL 040 ° T. 7 ft.
Code Code Code Direction Hgt.

6 sec. CLOUDS Sc Cu 1 3 TEMP. 84.0 °F. 75.8 °F.
Period Type Amount Dry Wet

BAR. 30.00 in. REL. HUM. 69 % WIND 045 ° T. 3 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C.	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.13	35.79	0.0	0.3	4.3	0.4
9	26.92	35.71				
23	26.88	35.75				
46	26.22	35.82				
69	24.87	35.91				
91	24.24	36.45				
139	20.87	36.67				
181	---	36.40				
219	---	36.08	0.5	10.2	5.7	0.0
256	15.50	35.84				
294	14.71	35.86				
334	13.09	35.53				
376	10.88	35.26				
422	9.60	35.25	1.4	19.1	1.8[a]	1.5
426	9.34	---				

(a) Green carbohydrates

STATION NO. 1-1A-13

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	27.13	35.79	23.29
10	26.92	35.71	23.30
20	26.88	35.74	23.33
30	26.70	35.77	23.41
50	26.02	35.83	23.67
75	24.68	35.98	24.20
100	24.19	36.52	24.75
150	20.00	36.65	26.04
200	16.50	36.24	26.60
250	15.70	35.84	26.48
300	13.45	35.84	26.97
400	10.12	35.25	27.15

STATION NO. 1-1A-14

DATE 27 4 1951 LAT. 22° 30' N. LONG. 85° 48' W.
Day Month Year
TIME 0545 DEPTH 600 MAX. SAMPLE DEPTH 764 WIRE ANGLE 23°
GCT Faths. Meters
WATER COLOR - WEATHER 01 SEA 2 SWELL 070 ° T. 4 ft.
Code Code Code Direction Hgt.
5 sec. CLOUDS Cu 3 TEMP. 78.3 °F. 74.4 °F.
Period Type Amount Dry Wet
BAR: 34.04 in. REL. HUM. 83% WIND 070 ° T. 4 VIS. 8
Direction Force Code

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	26.37	35.71	0	26.37	35.71	23.47
9	26.38	35.68	10	26.40	35.68	23.44
23	26.38	35.81	20	26.39	35.81	23.54
46	25.47	35.68	30	26.17	35.79	23.60
69	24.95	35.75	50	25.33	35.69	23.78
92	24.79	36.08	75	24.90	35.80	24.00
138	24.80	36.17	100	24.80	36.13	24.28
174	24.27	36.09	150	24.72	36.15	24.32
235	---	36.74	200	21.95	36.39	25.31
287	17.49	36.42	250	19.20	36.70	26.29
342	15.76	36.24	300	17.07	36.38	26.57
413	13.78	35.81	400	14.10	35.86	26.85
487	11.68	35.53	500	11.43	35.49	27.10
576	10.16	35.28				
764	---	35.75				

STATION NO. 1-1A-15

DATE 27 4 1951 LAT. 22° 30' N. LONG. 85° 25' W.
Day Month Year
TIME 1248 DEPTH 1100 MAX. SAMPLE DEPTH 2299 WIRE ANGLE 10 °
GCT Fathoms. Meters
WATER COLOR - WEATHER 01 SEA 2 SWELL --- ° T. 7 ft.
Code Code Code Direction Hgt.
5 sec. CLOUDS Sc Cu 1 1 TEMP. 78.2 °F. 73.4 °F.
Period Type Amount Dry Wet
BAR. 30.06 in. REL. HUM. 80 % WIND 045 ° T. 3 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.09	35.77	0.0	1.1	0.0	1.1
14	26.06	35.73				
33	25.94	35.81				
71	24.94	35.93				
105	24.01	36.26				
142	22.95	36.71				
212	19.75	36.69				
280	17.85	36.44				
408	---	35.88				
541	10.96	35.35				
796	6.43	34.88				
1058	4.91	34.85	1.0	21.1[b]	2.0[a]	0.0
1329	4.29	34.92				
1611	4.21	34.94				
2299	---	34.92	2.4	23.3[b]	2.8[a]	0.0

(a) Green carbohydrates
(b) Indicates not in accurate range of curve- value probably somewhat higher.

STATION NO. 1-1A-15

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	26.09	35.77	23.61
10	26.09	35.74	23.58
20	26.02	35.74	23.61
30	25.99	35.78	23.65
50	25.55	35.86	23.84
75	24.75	35.94	24.15
100	24.07	36.07	24.45
150	22.59	36.71	25.37
200	20.17	36.70	26.03
250	18.63	36.59	26.35
300	17.10	36.30	26.50
400	14.35	35.90	26.83
500	11.80	35.45	27.00
600	9.50	35.25	27.25
700	7.64	35.05	27.39
800	6.44	34.88	27.42
1000	5.16	34.84	27.55
1200	4.49	34.89	27.67
1500	4.20	34.93	27.73

STATION NO. 1-1A-16

DATE 27 4 1951 LAT. 22° 30' N. LONG. 85° 07' W.
Day Month Year
TIME 1900 DEPTH 1200 MAX. SAMPLE DEPTH 1210 WIRE ANGLE 14 °
GCT Faths. Meters
WATER COLOR - WEATHER 01 SEA 2 SWELL --- ° T. - ft.
Code Code Code Direction Hgt.
4 sec. CLOUDS Sc Cu 1 1 TEMP. 78.5 °F. 73.1 °F.
Period Type Amount Dry Wet
BAR. 30.04 in. REL. HUM. 77% WIND 045 ° T. 3 VIS. 9
Direction Force Code

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	26.16	35.82	0	26.16	35.82	23.62
10	25.86	35.86	10	25.86	35.86	23.75
29	25.55	35.86	20	25.70	35.86	23.80
58	25.10	35.88	30	25.55	35.86	23.84
87	24.97	36.06	50	25.21	35.87	23.95
115	24.41	36.26	75	25.00	35.97	24.09
170	22.81	36.76	100	24.77	36.14	24.29
223	---	36.73	150	23.53	36.58	25.00
324	15.77	36.04	200	21.31	36.76	25.77
508	11.51	35.46	250	19.03	36.45	26.14
600	7.50	34.85	300	16.81	36.11	26.43
802	6.14	34.74	400	14.00	35.85	26.86
1003	5.10	34.79	500	11.80	35.53	27.06
1210	4.74	34.87	600	7.50	34.85	27.25
			700	6.75	34.76	27.29
			800	6.13	34.74	27.35
			1000	5.10	34.79	27.52
			1200	4.78	34.87	27.62

STATION NO. 1-1A-17

DATE 28 4 1951 LAT. 22° 30' N. LONG. 84° 45' W.
Day Month Year

TIME 0045 DEPTH 1000 MAX. SAMPLE DEPTH 1208 WIRE ANGLE 21 °
GCT Faths. Meters

WATER COLOR - WEATHER 01 SEA 2 SWELL 050 ° T. 5 ft.
Code Code Code Direction Hgt.

4 sec. CLOUDS Cu 3 TEMP. 78.4 °F. 73.2 °F.
Period Type Amount Dry Wet

BAR. 30.00 in. REL. HUM. 78 % WIND 060 ° T. 4 VIS. 8
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.95	35.82	0.0	0.5	2.2	0.0
14	25.94	35.84				
33	25.59	35.82				
70	24.90	35.95				
103	---	36.24				
139	21.97	36.87				
265	19.93	36.47				
377	---	35.86				
487	12.06	35.48				
580	9.01	35.21				
685	6.70	34.85	2.1	24.4[b]	1.8	4.0
931	4.97	34.90				
1208	4.35	34.92				
*1200	--	---	2.8	20.4	7.4	0.0

*Uncorrected depth
(b) Indicates not in accurate range of curve- value probably somewhat higher.

STATION NO. 1-1A-17

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	25.95	35.82	23.69
10	25.95	35.84	23.70
20	25.88	35.83	23.72
30	25.63	35.82	23.79
50	25.30	35.88	23.93
75	24.61	35.98	24.22
100	23.55	36.19	24.69
150	21.80	36.87	25.71
200	21.00	36.80	25.88
250	20.28	36.56	25.89
300	18.74	36.20	26.02
400	15.13	35.78	26.56
500	11.51	35.46	27.06
600	8.39	35.14	27.34
700	6.53	34.84	27.38
800	5.68	34.86	27.50
1000	4.78	34.91	27.65
1200	4.36	34.92	27.71

STATION NO. 1-1A-18

DATE 28 4 1951 LAT. 22° 30' N. LONG. 84° 32' W.
Day Month Year
TIME 0443 DEPTH 600 MAX. SAMPLE DEPTH 448 WIRE ANGLE 20 °
GCT Faths. Meters
WATER COLOR - WEATHER 01 SEA 2 SWELL --- ° T. - ft.
Code Code Code Direction Hgt.
--- sec. CLOUDS Cu 3 TEMP. 77.8 °F. 72.9 °F.
Period Type Amount Dry Wet
BAR. 30.03 in. REL. HUM. 79% WIND 050 ° T. 4 VIS. 8
Direction Force Code

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	26.06	35.90	0	26.06	35.90	23.71
9	26.05	35.81	10	26.15	35.81	23.65
23	26.07	35.79	20	26.07	35.79	23.63
46	25.70	35.81	30	26.00	35.79	23.65
69	---	35.84	50	25.61	35.81	23.79
92	24.56	35.95	75	24.99	35.86	24.01
137	23.32	36.62	100	24.36	36.04	24.34
182	21.79	36.67	150	22.87	36.65	25.24
268	---	36.36	200	21.30	36.67	25.70
356	16.70	35.93	250	19.81	36.65	26.09
448	13.90	35.82	300	18.34	36.56	26.40
			400	15.26	35.86	26.59

STATION NO. 1-1A-20

DATE 28 4 1951 LAT. 23° 28' N. LONG. 84° 32' W.
Day Month Year
TIME 1452 DEPTH 1540 MAX. SAMPLE DEPTH 1296 WIRE ANGLE 37 °
GCT Faths Meters
WATER COLOR - WEATHER 01 SEA 2 SWELL 045 ° T. 3 ft.
Code Code Code Direction Hgt.
4 sec. CLOUDS Cu 1 TEMP. 79.5 °F. 73.0 °F.
Period Type Amount Dry Wet
BAR. 30.05 in. REL. HUM. 74 % WIND 045 ° T. 4 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.09	35.70	0.0	0.9	0	1.0
8	26.10	35.64				
24	26.09	35.62				
48	26.06	35.55				
72	25.52	35.64				
98	25.06	35.82				
148	24.05	36.18				
199	23.09	36.82				
304	---	36.42				
405	---	36.04				
515	12.75	35.66				
621	10.13	35.28	1.7	25.3[b]	1.5[a]	0.2
845	7.05	34.92				
1064	5.43	---				
1275	4.57	---	1.5	19.4	7.2[a]	0.0

(a) Green carbohydrates
(b) Indicates not in accurate range of curve- value probably somewhat higher.

STATION NO. 1-1A-20

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	26.09	35.70	23.55
10	26.10	35.64	23.51
20	26.09	35.63	23.50
30	26.09	35.59	23.47
50	26.06	35.55	23.45
75	25.52	35.64	23.69
100	25.09	35.81	23.95
150	24.12	36.14	24.49
200	23.19	36.80	25.26
250	22.05	36.71	25.52
300	20.70	36.51	25.74
400	17.50	36.10	26.25
500	14.09	35.77	26.78
600	11.09	35.45	27.13
700	9.16	35.15	27.23
800	7.60	34.97	27.33
1000	5.85	34.93	27.54
1200	4.85	34.98	27.70

STATION NO. 1-1A-21

DATE 29 4 1951 (Day Month Year) LAT. 23° 15' N. LONG. 83° 35' W.
TIME 0052 (GCT) DEPTH 1350 (Faths.) MAX. SAMPLE DEPTH 1201 (Meters) WIRE ANGLE 34 °
WATER COLOR - (Code) WEATHER 01 (Code) SEA 3 (Code) SWELL 045 (Direction) ° T. 9 (Hgt.) ft.
6 (Period) sec. CLOUDS Sc Cu 1 2 (Type Amount) TEMP. 78.6 °F. (Dry) 74.0 °F. (Wet)
BAR. 29.94 in. REL. HUM. 81% WIND 045 (Direction) ° T. 4 (Force) VIS. 8 (Code)

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	26.23	35.68	0	26.23	35.68	23.50
8	25.24	35.68	10	26.25	35.67	23.48
25	25.96	35.66	20	26.20	35.66	23.49
49	25.59	35.68	30	25.93	35.66	23.57
74	---	35.79	50	25.55	35.70	23.72
99	24.83	35.90	75	25.10	35.80	23.94
150	24.36	36.44	100	24.85	35.94	24.12
201	21.32	36.80	150	24.30	36.47	24.68
302	---	36.35	200	21.40	36.80	25.77
399	14.86	35.93	250	19.30	36.76	26.31
500	12.56	35.50	300	17.50	36.35	26.45
596	9.96	35.08	400	14.80	35.92	26.74
797	6.90	34.81	500	12.56	35.50	26.89
996	5.35	34.90	600	9.80	35.07	27.06
1201	4.61	34.85	700	8.15	34.89	27.19
			800	6.85	34.81	27.31
			1000	5.32	34.90	27.58
			1200	4.60	34.85	27.62

STATION NO. 1-1A-22

DATE 29 4 1951 (Day Month Year) LAT. 23° 15' N. LONG. 82° 50' W.
TIME 0858 (GCT) DEPTH 1000 (Faths.) MAX. SAMPLE DEPTH 1188 (Meters) WIRE ANGLE 20°
WATER COLOR - (Code) WEATHER 01 (Code) SEA 2 (Code) SWELL 090 (Direction) ° T. 8 (Hgt.) ft.
7 (Period) sec. CLOUDS Cu (Type) 1 (Amount) TEMP. 77.9 (Dry) °F. 73.2 (Wet) °F.
BAR. 29.91 in. REL. HUM. 79 % WIND 090 (Direction) ° T. 4 (Force) VIS. 8 (Code)

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	26.47	35.71	0	26.47	35.71	23.44
9	26.49	35.75	10	26.48	35.75	23.47
28	26.52	35.88	20	26.50	35.86	23.55
57	25.99	35.88	30	26.50	35.88	23.56
86	24.17	35.95	50	26.15	35.88	23.67
116	23.79	35.93	75	24.60	35.94	24.19
176	21.80	---	100	23.99	35.96	24.39
236	20.30	36.55	150	22.60	36.09	24.89
357	15.56	36.04	200	21.10	36.39	25.54
595	9.02	35.01	250	19.49	36.54	26.09
712	7.30	34.85	300	17.29	36.25	26.42
952	5.48	34.83	400	13.82	35.84	26.89
1188	4.56	34.87	500	11.12	35.40	27.08
			600	9.00	35.00	27.14
			700	7.45	34.85	27.26
			800	6.50	34.82	27.37
			1000	5.20	34.83	27.54
			1200	4.50	34.88	27.66

STATION NO. 1-1A-23

DATE 29 (Day) 4 (Month) 1951 (Year) LAT. 23° 11' N. LONG. 82° 24' W.
TIME 1406 (GCT) DEPTH 600 (Faths.) MAX. SAMPLE DEPTH 724 (Meters) WIRE ANGLE 20°
WATER COLOR - (Code) WEATHER 01 (Code) SEA 2 (Code) SWELL 090 (Direction) ° T. 5 (Hgt.) ft.
6 (Period) sec. CLOUDS Cu (Type) 1 (Amount) TEMP. 79.0 (Dry) °F. 73.6 (Wet) °F.
BAR. 29.91 in. REL. HUM. 77 % WIND 090 (Direction) ° T. 3 (Force) VIS. 9 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.28	35.79	0.0	1.3	2.1	0.0
9	26.29	35.81				
24	26.20	35.82				
48	25.37	35.79				
72	24.92	35.97				
97	23.89	36.02				
205	21.38	36.62				
257	---	36.49				
309	17.10	36.26				
365	15.58	36.11	2.2	18.0	0.0[a]	0.0
416	14.52	---				
518	11.53	35.53				
624	9.38	35.23				
724	7.72	35.03	2.8	19.2	3.5[a]	0.0

(a) Green carbohydrates

STATION NO. 1-1A-23

VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	σ_t
0	26.28	35.79	23.56
10	26.29	35.81	23.57
20	26.18	35.82	23.62
30	25.89	35.81	23.70
50	25.28	35.79	23.87
75	24.80	35.98	24.16
100	23.85	36.03	24.49
150	23.19	36.41	24.97
200	21.50	36.61	25.60
250	19.36	36.51	26.10
300	17.37	36.30	26.44
400	14.89	35.94	26.74
500	12.00	35.59	27.07
600	9.80	35.23	27.18
700	8.09	35.08	27.34

STATION NO. 1-1A-24

DATE 29 4 1951 LAT. 23° 27 N. LONG. 82° 24 W.
Day Month Year

TIME 1837 DEPTH 900 MAX. SAMPLE DEPTH 875 WIRE ANGLE 22°
GCT Faths. Meters

WATER COLOR - WEATHER 01 SEA 3 SWELL --- ° T. 8 ft.
Code Code Code Direction Hgt.

6 sec. CLOUDS Cb Cu 1 2 TEMP. 78.5 °F. 73.8 °F.
Period Type Amount Dry Wet

BAR. 29.90 in. REL. HUM. 83 % WIND 090 ° T. 4 VIS. 9
Direction Force Code

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	26.62	36.35	0	26.62	36.35	23.88
9	26.56	36.31	10	26.56	36.31	23.87
27	26.50	36.09	20	26.52	36.19	23.79
53	25.18	36.42	30	26.46	36.09	23.73
79	23.69	36.49	50	25.70	36.42	24.22
104	23.39	36.53	75	23.80	36.49	24.85
197	19.32	36.67	100	23.45	36.52	24.97
363	---	36.29	150	22.14	36.62	25.43
446	---	35.84	200	19.30	36.66	26.23
529	9.78	35.19	250	16.75	36.41	26.67
700	8.13	35.01	300	14.70	36.15	26.94
875	6.82	34.90	400	12.15	35.61	27.05
			500	10.20	35.24	27.12
			600	9.04	35.09	27.20
			700	8.13	35.01	27.28
			800	7.43	34.94	27.33

STATION NO. 1-1A-25

DATE 29 4 1951 LAT. 23° 46' N. LONG. 82° 24' W.
Day Month Year
TIME 2310 DEPTH 800 MAX. SAMPLE DEPTH 892 WIRE ANGLE - °
GCT Faths. Meters
WATER COLOR - WEATHER 01 SEA 2 SWELL 090 °T. 6 ft.
Code Code Code Direction Hgt.
--- sec. CLOUDS Cs 7 TEMP. 77.0 °F. 74.0 °F.
Period Type Amount Dry Wet
BAR. 29.89 in. REL. HUM. 87 % WIND 090 ° T. 5 VIS.8
Direction Force Code

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	24.83	36.06	0	24.83	36.06	24.21
9	24.73	36.09	10	24.73	36.09	24.27
27	23.53	36.15	20	24.05	36.12	24.49
55	22.29	36.27	30	23.50	36.10	24.69
82	21.40	36.42	50	22.41	36.26	25.08
109	19.76	36.42	75	21.66	36.42	25.41
152	17.68	36.35	100	20.70	36.43	25.68
212	15.34	35.91	150	18.20	36.38	26.30
306	12.35	35.53	200	15.80	36.03	26.60
388	9.73	35.19	250	14.10	35.74	26.76
556	7.19	34.96	300	12.50	35.53	26.92
725	6.31	34.92	400	9.51	35.16	27.18
892	5.49	34.94	500	7.78	35.00	27.33
			600	6.95	34.94	27.40
			700	6.44	34.92	27.45
			800	5.93	34.93	27.53

STATION NO. 1-1A-26

DATE 30 4 1951 LAT. 24° 03' N. LONG. 82° 24' W.
Day Month Year

TIME 0311 DEPTH 350 MAX. SAMPLE DEPTH 298 WIRE ANGLE 0 °
GCT Faths. Meters

WATER COLOR - Code WEATHER 01 Code SEA 2 Code SWELL 090 ° Direction T. 3 ft. Hgt.

4 sec. Period CLOUDS Cu Type 3 Amount TEMP. 77.0 °F. Dry 75.1 °F. Wet

BAR. 29.91 in. REL. HUM. 91 % WIND 090 ° Direction T. 3 Force VIS. 8 Code

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	24.72	36.17	0	24.72	36.17	24.33
10	24.68	36.13	10	24.68	36.13	24.31
25	24.43	36.09	20	24.48	36.09	24.34
49	21.70	36.38	30	23.70	36.18	24.64
74	19.67	36.31	50	21.70	36.38	25.37
99	16.79	36.20	75	19.20	36.30	25.98
148	13.57	35.70	100	16.70	36.20	26.52
198	13.41	35.55	150	13.56	35.69	26.83
298	9.83	35.19	200	13.39	35.54	26.75
			250	11.80	35.34	26.91
			300	9.80	35.19	27.15

STATION NO. 1-1A-27

DATE 4 5 1951 LAT. 24° 22' N. LONG. 82° 24' W.
Day Month Year
TIME 0047 DEPTH 70 MAX. SAMPLE DEPTH 100 WIRE ANGLE 0 °
GCT Faths. Meters
WATER COLOR - WEATHER 04 SEA 1 SWELL 330 ° T. 1 ft.
Code Code Code Direction Hgt.
8 sec. CLOUDS - -- TEMP. 77.9 °F. 71.1 °F.
Period Type Amount Dry Wet
BAR. 29.89 in. REL. HUM. 71 % WIND 330 °T. 1 VIS. 7
Direction Force Code

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	25.51	36.06	0	25.51	36.06	24.01
10	24.85	36.02	10	24.85	36.02	24.18
25	23.12	36.09	20	23.09	36.05	24.72
50	20.24	36.24	30	22.51	36.13	24.95
75	16.38	36.02	50	20.24	36.24	25.66
100	13.84	35.71	75	16.38	36.02	26.46
			100	13.84	35.71	26.79

STATION NO. 1-1A-28

DATE 4 5 1951 (Day Month Year) LAT. 24° 22' N. LONG. 83° 27'W.

TIME 0916 (GCT) DEPTH 320 (Faths.) MAX. SAMPLE DEPTH 360 (Meters) WIRE ANGLE 16°

WATER COLOR - (Code) WEATHER 00 (Code) SEA 1 (Code) SWELL 345 (Direction) ° T. 1 (Hgt.) ft.

- (Period) sec. CLOUDS 00 (Type) 00 (Amount) TEMP. 76.0 °F. (Dry) 71.5 °F. (Wet)

BAR. 29.88in. REL. HUM. 80 % WIND 350 (Direction) ° T. 1 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.16	36.35	0.1	0.5	2.9	1.8[c]
10	24.86	36.33				
24	24.71	36.35				
48	22.88	36.35				
71	21.92	36.69				
94	---	36.60				
139	12.81	35.86				
183	12.12	35.46	1.5	21.6[b]	7.8[a]	---
271	9.43	35.16				
360	8.10	35.07		18.2	10.3[a]	1.0

(a) Green carbohydrates
(b) Indicates not in accurate range of curve- value probably somewhat higher.
(c) Indicates cloudy sample.

STATION NO. 1-1A-28

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	25.16	36.35	24.33
10	24.86	36.33	24.41
20	24.72	36.34	24.46
30	24.40	36.35	24.56
50	22.80	36.38	25.06
75	21.70	36.69	26.60
100	19.02	36.58	26.24
150	12.78	35.74	27.03
200	11.79	35.40	26.96
250	10.00	35.22	27.14
300	9.00	35.12	27.23

STATION NO. 1-1A-29

DATE 4 5 1951 (Day Month Year) LAT. 24° 22' N. LONG. 83° 55' W.

TIME 1517 (GCT) DEPTH 600 (Faths.) MAX. SAMPLE DEPTH 484 (Meters) WIRE ANGLE 20°

WATER COLOR - (Code) WEATHER 04 (Code) SEA 1 (Code) SWELL 330 (Direction) ° T. 2 (Hgt.) ft.

5 (Period) sec. CLOUDS Ci (Type) 1 (Amount) TEMP. 81.5 (Dry) °F. 74.6 (Wet) °F.

BAR. 29.91 in. REL. HUM. 72 % WIND 330 (Direction) ° T. 1 (Force) VIS. 7 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.45	35.43	0.1	1.1	1.0	0.0
10	23.65	35.75				
24	22.56	35.90				
46	21.93	36.31				
68	21.68	36.56				
89	20.64	36.53				
126	19.04	36.38				
158	16.90	36.31				
218	14.42	35.90				
231	12.76	35.86				
345	11.38	35.50	1.3	14.9	3.9[a]	---
414	9.87	35.26				
484	10.06	35.32				
*800	---	---	---	10.9	1.2	---

*Uncorrected depth

(a) Green carbohydrates

STATION NO. 1-1A-29

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	24.45	35.43	23.85
10	23.65	35.75	24.33
20	22.80	35.90	24.69
30	22.38	36.05	24.93
50	21.89	36.37	25.31
75	21.50	36.56	25.56
100	20.21	36.48	25.85
150	17.29	36.33	26.48
200	15.05	36.10	26.83
250	13.47	35.88	27.00
300	12.35	35.80	27.16
400	10.07	35.26	27.16

STATION NO. 1-1A-30

DATE 5 5 1951 LAT. 24° 23' N. LONG. 84° 40' W.
Day Month Year

TIME 0235 DEPTH 1820 MAX. SAMPLE DEPTH 2278 WIRE ANGLE 13°
GCT Faths. Meters

WATER COLOR - Code WEATHER 01 Code SEA 2 Code SWELL 280 ° Direction T. 2 ft. Hgt.

5 sec. Period CLOUDS Cu Type 1 Amount TEMP. 78.8 °F. Dry 71.3 °F. Wet

BAR. 29.86 in. REL. HUM. 68 % WIND 280 ° Direction T. 2 Force VIS. 9 Code

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	25.76	35.77	0	25.76	35.77	23.71
15	24.36	35.59	10	25.00	35.63	23.84
34	23.92	35.95	20	24.17	35.58	24.05
73	21.70	36.35	30	23.97	35.58	24.11
107	21.45	36.60	50	22.70	35.90	24.72
145	---	36.53	75	21.69	36.35	25.35
216	16.81	36.31	100	21.49	36.60	25.59
286	13.87	35.91	150	20.47	36.52	25.81
417	10.45	35.26	200	17.82	36.37	26.38
553	8.14	34.96	250	14.92	36.11	26.86
680	6.80	34.94	300	13.34	35.76	26.93
815	5.64	34.90	400	10.76	35.30	27.07
1076	4.72	34.94	500	8.88	35.04	27.19
1340	4.30	34.99	600	7.65	34.95	27.31
1610	4.21	34.96	700	6.55	34.94	27.45
2278	4.20	34.96	800	5.73	34.90	27.53
			1000	4.92	34.92	27.64
			1200	4.44	34.96	27.73
			1500	4.23	34.97	27.76
			2000	4.20	34.95	27.75

STATION NO. 1-1A-31

DATE 5 5 1951 LAT. 24° 22' N. LONG. 85° 31' W.
Day Month Year

TIME 1320 DEPTH 1800 MAX. SAMPLE DEPTH 761 WIRE ANGLE 25°
GCT Faths. Meters

WATER COLOR - WEATHER 13 SEA 2 SWELL 280 ° T. 4 ft.
Code Code Code Direction Hgt.

4 sec. CLOUDS Sc Cu 2 2 TEMP. 80.3 °F. 73.0 °F.
Period Type Amount Dry Wet

BAR. 29.90 in. REL. HUM. 72 % WIND 280 ° T. 2 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.12	35.91	1.6	0.4	16.9	0.0
14	26.09	35.88				
32	25.86	35.88				
68	25.05	35.91				
99	24.52	36.04				
134	23.88	36.26				
200	22.66	36.74				
265	19.64	36.73				
389	15.02	35.95				
516	10.84	35.26				
634	8.77	35.05				
761	7.08	34.90				
* 800	---	---	0.0	1.5	0.7	0.0
*1500	---	---	0.8	18.9	0.0[a]	0.5

*Uncorrected depth.
(a) Green carbohydrates

STATION NO. 1-1A-31

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	26.12	35.91	23.70
10	26.09	35.88	23.69
20	26.02	35.88	23.71
30	25.87	35.88	23.76
50	25.47	35.89	23.89
75	24.86	35.94	24.11
100	24.45	36.04	24.31
150	23.70	36.40	24.81
200	22.66	36.74	25.37
250	20.49	36.75	25.98
300	18.45	36.60	26.40
400	14.45	35.83	26.75
500	11.25	35.31	26.99
600	9.30	35.11	27.17
700	7.85	34.97	27.29

STATION NO. 1-1A-32

DATE 5 5 1951 (Day Month Year) LAT. 24° 22' N. LONG. 86° 30' W.

TIME 2303 (GCT) DEPTH 1150 (Faths.) MAX. SAMPLE DEPTH 1813 (Meters) WIRE ANGLE 0 °

WATER COLOR - (Code) WEATHER 01 (Code) SEA 2 (Code) SWELL 330 (Direction) ° T. 4 (Hgt.) ft.

5 (Period) sec. CLOUDS Ci (Type) Cu 1 1 (Amount) TEMP. 80.1 (Dry) °F. 73.0 (Wet) °F.

BAR. 29.86 in. REL. HUM. 72 % WIND 270 (Direction) ° T. 3 (Force) VIS. 9 (Code)

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	26.56	35.88	0	26.56	35.88	23.54
15	26.15	35.95	10	26.21	35.94	23.70
35	25.99	35.99	20	26.10	35.97	23.75
75	25.22	36.13	30	26.00	35.99	23.80
110	24.83	36.65	50	25.75	36.03	23.91
150	23.58	36.83	75	25.32	36.13	24.12
226	19.49	36.87	100	24.95	36.40	24.43
302	17.74	36.64	150	23.58	36.83	25.17
450	14.01	35.88	200	20.65	36.88	26.04
608	10.04	35.26	250	18.84	36.84	26.49
755	7.84	34.97	300	17.84	36.70	26.63
911	6.11	34.94	400	15.50	36.11	26.73
1213	4.52	34.97	500	12.75	35.64	26.96
1513	4.22	34.99	600	10.25	35.29	27.15
1813	4.19	35.05	700	8.60	35.05	27.24
			800	7.22	34.95	27.37
			1000	5.46	34.94	27.59
			1200	4.58	34.97	27.72
			1500	4.20	34.99	27.78

STATION NO. 1-1A-33

DATE 6 5 1951 LAT. 24° 22' N. LONG. 87° 15' W.
Day Month Year
TIME 0530 DEPTH 750 MAX. SAMPLE DEPTH 1167 WIRE ANGLE 9 °
GCT Faths. Meters
WATER COLOR - WEATHER 01 SEA 2 SWELL 270 ° T. 5 ft.
Code Code Code Direction Hgt.
6 sec. CLOUDS Cu 2 TEMP. 78.0 °F. 72.5 °F.
Period Type Amount Dry Wet
BAR. 29.91 in. REL. HUM. 77 % WIND 270 ° T. 3 VIS. 8
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.19	36.04	0.1	0.6	0.0	2.5
10	27.18	36.04				
25	27.12	36.08				
54	26.07	36.20				
79	25.22	36.42				
108	23.39	36.98				
214	17.87	36.65				
312	15.89	36.09				
412	13.04	35.59				
507	10.37	35.21				
602	8.57	34.99	2.1	21.1[b]	10.6[a]	0.8
784	6.04	34.87				
973	4.78	34.87				
1167	4.34	34.92	2.4	21.5[b]	2.4[a]	0.0

(a) Green carbohydrates.
(b) Indicates not in accurate range of curve-value probably somewhat higher.

STATION NO. 1-1A-33

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	27.19	36.04	23.46
10	27.18	36.04	23.46
20	27.11	36.06	23.50
30	26.98	36.10	23.57
50	26.37	36.19	23.84
75	25.40	36.38	24.28
100	24.00	36.97	25.15
150	20.60	36.92	26.08
200	18.42	36.71	26.49
250	17.10	36.43	26.60
300	16.18	36.15	26.61
400	13.40	35.65	26.83
500	10.55	35.23	27.05
600	8.57	35.00	27.21
700	7.10	34.91	27.35
800	5.95	34.87	27.48
1000	4.73	34.88	27.63
1200	(4.35)	(34.93)	27.71

( ) Extrapolated values.

STATION NO. 1-1A-34

DATE 6 5 1951 LAT. 24° 38' N. LONG. 88° 12' W.
Day Month Year

TIME 1245 DEPTH 850 MAX. SAMPLE DEPTH 1381 WIRE ANGLE 4 °
GCT Faths. Meters

WATER COLOR - WEATHER 01 SEA 2 SWELL 000 ° T. 3 ft.
Code Sc Code Code Direction Hgt.

4 sec. CLOUDS Ci Cu 3,2,3 TEMP. 78.2 °F. 72.0 °F.
Period Type Amount Dry Wet

BAR. 29.96 in. REL. HUM. 75 % WIND 000 ° T. 3 VIS. 9
Direction Force Code

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	25.48	36.22	0	25.48	36.22	24.14
10	25.48	36.24	10	25.48	36.24	24.15
30	24.92	36.58	20	25.29	36.45	24.37
60	20.50	36.49	30	24.92	36.58	24.58
90	17.97	36.35	50	21.50	36.53	25.54
120	16.17	36.17	75	19.30	36.40	26.03
180	13.95	35.79	100	17.12	36.30	26.50
240	12.74	35.55	150	14.85	35.98	26.78
359	9.77	35.10	200	13.61	35.72	26.84
473	7.76	34.99	250	12.45	35.49	26.90
593	6.59	34.85	300	11.15	35.26	26.97
708	5.74	34.85	400	8.95	35.07	27.20
942	4.88	34.88	500	7.47	34.95	27.33
1166	4.36	34.88	600	6.53	34.84	27.38
1381	4.24	34.96	700	5.79	34.85	27.48
			800	5.38	34.86	27.54
			1000	4.70	34.88	27.64
			1200	4.31	34.89	27.69

STATION NO. 1-1A-35

DATE 6 5 51 LAT. 25° 09' N. LONG. 88° 00' W.
Day Month Year
TIME 1836 DEPTH 1800 MAX. SAMPLE DEPTH 2275 WIRE ANGLE 20 °
GCT Faths. Meters
WATER COLOR - WEATHER 01 SEA 2 SWELL 080 ° T. 4 ft.
Code Code Code Direction Hgt.
4 sec. CLOUDS Ci Cu 4 1 TEMP. 79.8 °F. 70.3 °F.
Period Type Amount Dry Wet
BAR. 29.96 in. REL. HUM. 61 % WIND 090 ° T. 2 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.62	36.09	0.0	0.9	6.2	0.0
14	25.17	36.08				
33	23.93	36.04				
71	20.78	36.42				
103	18.34	---				
141	16.10	36.35				
212	13.92	36.00				
282	11.89	35.62				
419	9.09	35.16				
564	7.23	35.03				
700	5.99	35.03				
842	5.22	35.05				
1113	4.39	35.08	1.7	21.5[b]	0.4	0.0
1381	4.22	34.97				
1647	4.19	34.88				
2275	4.20	34.85	1.3	18.1	0.0	0.0

(b) Indicates not in accurate range of curve- value probably somewhat higher.

STATION NO. 1-1A-35

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	25.62	36.09	23.99
10	25.40	36.08	24.05
20	24.55	36.08	24.31
30	24.10	36.02	24.40
50	22.45	36.25	25.06
75	20.50	36.42	25.73
100	18.65	36.40	26.20
150	15.90	36.34	26.82
200	14.30	36.08	26.97
250	12.73	35.79	27.08
300	11.45	35.55	27.14
400	9.38	35.20	27.23
500	7.99	35.07	27.35
600	6.87	35.03	27.48
700	5.99	35.03	27.60
800	5.38	35.05	27.69
1000	4.62	35.07	27.80
1200	4.31	35.05	27.81
1500	4.21	34.92	27.72
2000	4.12	34.86	27.68

STATION NO. 1-1A-36

DATE 7 5 1951 LAT. 25° 46' N. LONG. 88° 00' W.
Day Month Year
TIME 0115 DEPTH 1700 MAX. SAMPLE DEPTH 854 WIRE ANGLE 25°
GCT Faths. Meters
WATER COLOR -- WEATHER 01 SEA 1 SWELL 080 ° T. 2 ft.
Code Ac Code Code Direction Hgt.
4 sec. CLOUDS Ci St 4,3,1 TEMP. 78.0 °F. 70.0 °F.
Period Type Amount Dry Wet
BAR. 29.98 in. REL. HUM. 67 % WIND 080 ° T. 1 VIS. 8
Direction Force Code

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	25.73	36.24	0	25.73	36.24	24.07
14	25.66	36.29	10	25.67	36.29	24.13
33	25.34	36.18	20	25.40	36.24	24.18
70	---	36.65	30	25.21	36.18	24.19
103	22.82	---	50	24.90	36.35	24.41
140	21.19	36.45	75	24.00	36.65	24.91
204	18.14	36.24	100	23.00	36.58	25.15
263	14.73	36.06	150	20.70	36.44	25.69
360	11.28	35.34	200	18.18	36.25	26.20
438	9.05	34.88	250	15.35	36.10	26.76
505	7.62	---	300	13.30	35.83	26.99
617	6.20	34.85	400	9.80	34.99	27.00
854	5.07	34.88	500	7.77	34.86	27.22
			600	6.37	34.85	27.41
			700	5.55	34.86	27.52
			800	5.19	34.87	27.57

STATION NO. 1-1A-37

DATE 7 5 1951 (Day Month Year) LAT. 26° 22' N. LONG. 87° 55' W.

TIME 0836 (GCT) DEPTH 1500 (Faths.) MAX. SAMPLE DEPTH 753 (Meters) WIRE ANGLE 37°

WATER COLOR - (Code) WEATHER 01 (Code) SEA 1 (Code) SWELL 170 (Direction) ° T. 4 (Hgt.) ft.

5 (Period) sec. CLOUDS -- (Type) -- (Amount) TEMP. 77.8 (Dry) °F. 69.9 (Wet) °F.

BAR. 29.96 in. REL. HUM. 67 % WIND 170 (Direction) ° T. 2 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.70	36.24	0.0	0.7	4.2	0.0
12	25.71	36.08				
28	25.08	36.13				
60	23.37	36.51				
85	22.27	36.83				
114	20.97	36.69				
163	18.83	36.58				
208	17.22	36.38				
296	13.82	35.82				
390	10.81	35.30				
480	9.05	35.07				
572	7.55	34.87				
753	5.93	34.83	1.8	13.3	0.0[a]	0.0
*1500	---	---	1.6	22.8[b]	0.5	0.0

(a) Green carbohydrates
(b) Indicates not in accurate range of curve- value probably somewhat higher

* Uncorrected depth.

STATION NO. 1-1A-37

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	25.70	36.24	24.08
10	25.70	36.18	24.04
20	25.60	36.09	24.00
30	25.00	36.16	24.24
50	24.30	36.41	24.64
75	22.60	36.79	25.43
100	21.55	36.76	25.70
150	19.40	36.61	26.17
200	17.58	36.42	26.48
250	15.80	36.12	26.67
300	13.59	35.82	26.92
400	10.60	35.27	27.08
500	8.81	35.00	27.17
600	7.22	34.86	27.30
700	6.30	34.83	27.40

STATION NO. 1-1A-38

DATE 7 5 1951 LAT. 26° 54' N. LONG. 88° 00' W.
Day Month Year

TIME 1633 DEPTH 1400 MAX. SAMPLE DEPTH 1980 WIRE ANGLE 37 °
GCT Faths. Meters

WATER COLOR -- WEATHER 01 SEA 2 SWELL 0 ° T. 0 ft.
Code Code Code Direction Hgt.

0 sec. CLOUDS Cs 6 TEMP. 79.0 °F. 72.0 °F.
Period Type Amount Dry Wet

BAR. 30.05 in. REL. HUM. 71 % WIND 025 ° T. 2 VIS. 9
Direction Force Code

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	25.07	34.78	0	25.07	34.78	23.18
12	25.05	36.18	10	25.06	36.18	24.23
28	23.55	36.51	20	23.90	36.49	24.82
60	21.30	36.53	30	23.10	36.51	25.07
88	20.06	36.47	50	21.90	36.53	25.43
120	18.26	36.47	75	20.89	36.50	25.68
180	14.99	36.06	100	19.35	36.46	26.06
239	12.86	35.68	150	16.40	36.31	26.68
352	9.81	35.14	200	14.20	35.90	26.86
471	7.80	34.90	250	12.60	35.62	26.97
582	6.51	34.70	300	11.20	35.36	27.04
701	5.65	34.74	400	9.00	35.03	27.16
934	4.68	34.76	500	7.50	34.83	27.23
1165	4.31	34.87	600	6.40	34.70	27.28
1398	4.20	34.83	700	5.65	34.74	27.41
1980	4.19	34.85	800	5.19	34.76	27.48
			1000	4.53	34.79	27.58
			1200	4.25	34.87	27.68
			1500	4.19	34.81	27.64
			2000	(4.15)	(34.85)	27.67

() Extrapolated values

STATION NO. 1-1A-39

DATE 8 5 1951 LAT. 28° 11' N. LONG. 88° 00' W.
Day Month Year

TIME 0310 DEPTH 1200 MAX. SAMPLE DEPTH 2117 WIRE ANGLE 20 °
GCT Faths. Meters

WATER COLOR -- WEATHER 01 SEA 2 SWELL 025 ° T. 4 ft.
Code Code Code Direction Hgt.

6 sec. CLOUDS -- -- TEMP. 72.6 °F. 67.5 °F.
Period Type Amount Dry Wet

BAR. 30.05 in. REL. HUM. 78% WIND 025 ° T. 2 VIS. 8
Direction Force Code

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	23.91	35.68	0	23.91	35.68	24.20
14	23.81	35.75	10	23.90	35.74	24.25
33	21.71	36.08	20	23.50	35.87	24.47
70	21.20	36.29	30	21.80	35.99	25.04
103	20.04	36.31	50	21.55	36.21	25.28
140	18.96	36.44	75	21.10	36.30	25.47
211	15.22	35.97	100	20.25	36.31	25.71
280	13.16	---	150	18.60	36.44	26.24
413	9.89	34.94	200	15.70	36.13	26.70
554	7.72	34.79	250	14.41	35.75	26.70
685	6.47	34.78	300	13.05	35.44	26.74
822	5.54	34.81	400	10.20	34.98	26.92
1090	4.60	34.85	500	8.40	34.83	27.10
1362	4.27	34.88	600	7.29	34.78	27.23
1637	4.19	34.88	700	6.40	34.78	27.35
2117	4.21	34.88	800	5.70	34.80	27.45
			1000	4.85	34.84	27.59
			1200	4.39	34.86	27.65
			1500	4.21	34.88	27.69
			2000	4.19	34.88	27.69

STATION NO. 1-1A-40

DATE 8 5 1951 LAT. 28° 13' N. LONG. 88° 52' W.
Day Month Year

TIME 1039 DEPTH 740 MAX. SAMPLE DEPTHS 960 WIRE ANGLE 18°
GCT Faths. Meters

WATER COLOR -- WEATHER 01 SEA 2 SWELL 070 ° T. 3 ft.
Code Code Code Direction Hgt.

4 sec. CLOUDS Sc 9 TEMP. 73.4 °F. 67.5 °F.
Period Type Amount Dry Wet

BAR. 30.06 in. REL. HUM. 73 % WIND 070 ° T. 2 VIS. 9
Direction Force Code

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	23.59	33.80	0	23.59	33.80	22.88
9	23.67	35.32	10	23.67	35.61	24.22
23	22.28	36.47	20	22.45	36.41	25.18
47	21.57	36.53	30	21.99	36.51	25.39
71	21.06	36.44	50	21.50	36.53	25.54
95	20.47	36.40	75	21.01	36.43	25.60
147	17.03	36.15	100	20.10	36.39	25.81
193	15.44	35.99	150	17.00	36.14	26.41
284	12.14	35.46	200	15.02	35.96	26.72
381	9.91	35.34	250	13.20	35.63	26.86
473	8.31	35.05	300	11.71	35.43	27.00
571	6.91	34.83	400	9.60	35.29	27.27
665	6.31	34.90	500	7.83	34.97	27.30
764	5.68	36.53	600	6.70	34.85	27.36
960	4.92	34.79	700	6.08	34.90	27.48
			800	5.41	34.87	27.54
			1000	(4.90)	(34.77)	27.53

) Extrapolated values.

STATION NO. 1-1A-41

DATE 8 5 1951 LAT. 28° 13' N. LONG. 89° 49' W.
Day Month Year

TIME 1718 DEPTH 390 MAX. SAMPLE DEPTH 594 WIRE ANGLE 8 °
GCT Faths. Meters

WATER COLOR -- WEATHER 01 SEA 3 SWELL 070 ° T. 6 ft.
Code Code Code Direction Hgt.

4 sec. CLOUDS Sc 9 TEMP. 75.0 °F. 67.7 °F.
Period Type Amount Dry Wet

BAR. 30.07 in. REL. HUM. 70 % WIND 070 ° T. 5 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.02	36.44	0.0	0.9	0.0	1.3
10	24.03	36.42				
25	22.81	36.40				
49	21.17	36.38				
74	20.71	36.36				
98	19.66	36.24				
198	13.49	35.61				
297	10.49	35.10	1.4	21.6[b]	1.4[a]	0.5
396	8.77	34.83				
495	7.73	34.90				
594	7.12	34.69	1.7	23.7[b]	5.8[a]	0.0

(a) Green carbohydrates.
(b) Indicates not in accurate range of curve-value probably somewhat higher.

STATION NO. 1-1A-41

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	24.02	36.44	24.75
10	24.03	36.42	24.73
20	23.20	36.40	24.96
30	22.10	36.39	25.26
50	21.17	36.38	25.52
75	20.60	36.36	25.66
100	19.50	36.24	25.86
150	16.25	35.97	26.45
200	13.41	35.61	26.80
250	11.75	35.29	26.88
300	10.45	35.10	26.97
400	8.70	34.82	27.04
500	7.68	34.75	27.15
600	(7.09)	(34.68)	27.18

) Extrapolated values.

STATION NO. 1-1A-42

DATE 9 5 1951 LAT. 28° 08' N. LONG. 91° 15' W.
Day Month Year

TIME 0253 DEPTH 51 MAX. SAMPLE DEPTH 70 WIRE ANGLE 20°
GCT Faths. 60 Meters

WATER COLOR -- WEATHER 07 SEA 4 SWELL 070 ° T. 10 ft.
Code Code Code Direction Hgt.

7 sec. CLOUDS -- -- TEMP. 72.0 °F. 70.1 °F.
Period Type Amount Dry Wet

BAR. 29.96 in. REL. HUM. 91 % WIND 070 ° T. 6 VIS. 5
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	23.09	36.11	0.0	0.4	2.5	0.0
9	23.07	36.08				
23	20.95	36.20				
47	20.36	36.40	0.0	1.0	5.2	0.7
70	19.69	36.24	0.1	1.1	0.4	0.1

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	23.09	36.11	24.77
10	23.07	36.08	24.75
20	21.10	36.20	25.40
30	20.80	36.33	25.58
50	20.28	36.39	25.76
75	(19.60)	(36.25)	25.84

Extrapolated values.

Figure 16.--Locations of stations occupied on Cruise 2-1B.

STATION NO. 2-1B-1

DATE 5 6 1951 LAT. 28° 51' N. LONG. 95° 11' W.
Day Month Year

TIME 0427 DEPTH 10 MAX. SAMPLE DEPTH 13 WIRE ANGLE 0°
GCT Faths. Meters

WATER COLOR - WEATHER 00 SEA 2 SWELL 045 ° T. 3 ft.
Code Code Code Direction Hgt.

6 sec. CLOUDS -- -- TEMP. 77.6 °F. 73.5°F.
Period Type Amount Dry Wet

BAR. 30.03 in. REL. HUM. 83% WIND 045 ° T. 2 VIS. 8
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.42	---	0.0	0.3	1.0	0.1
6	26.46	---	0.2	0.2	2.6	0.4
13	23.80	33.75	1.0	1.0	0.2	1.5

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	26.42	---	---
10	26.25	---	---

STATION NO. 2-1B-2

DATE 5 6 1951 (Day Month Year) LAT. 28° 28' N. LONG. 95° 49' W.
TIME 1015 (GCT) DEPTH 10 (Faths.) MAX. SAMPLE DEPTH 12 (Meters) WIRE ANGLE 0 °
WATER COLOR - (Code) WEATHER 01 (Code) SEA 2 (Code) SWELL --- ° (Direction) T. 4 ft. (Hgt.)
7 sec. (Period) CLOUDS Cu (Type) 2 (Amount) TEMP. 77.0 °F. (Dry) 74.3 °F. (Wet)
BAR. 29.99 in. REL. HUM. 88 % WIND 030 ° (Direction) T. 2 (Force) VIS. 8 (Code)

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	26.37	---	0	26.37	---	---
6	26.37	---	10	26.25	---	---
12	26.15	---				

STATION NO. 2-1B-3

DATE 5 6 1951 (Day Month Year) LAT. 28° 09' N. LONG. 96° 27' W.
TIME 1520 (GCT) DEPTH 10 (Faths.) MAX. SAMPLE DEPTH 12 (Meters) WIRE ANGLE 0°
WATER COLOR -- (Code) WEATHER 01 (Code) SEA 2 (Code) SWELL 090 ° (Direction) T. 4 ft. (Hgt.)
6 sec. (Period) CLOUDS Cu (Type) 2 (Amount) TEMP. 81.3 °F. (Dry) 74.3 °F. (Wet)
BAR. 30.06 in. REL. HUM. 72 % WIND 090 ° (Direction) T. 2 (Force) VIS. 9 (Code)

OBSERVED VALUES						
Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.09	32.48	0.2	0.3	0.8	0.6
6	26.07	32.52	0.0	0.0	3.0	0.6
12	25.95	32.47	0.4	0.0	1.9	0.6

STATION NO. 2-1B-3

VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	σ_t
0	26.09	32.48	21.13
10	25.95	32.49	21.18

STATION NO. 2-1B-4

DATE 5 6 1951 (Day Month Year) LAT. 27° 40' N. LONG. 97° 00' W.
TIME 2022 (GCT) DEPTH 10 (Faths.) MAX. SAMPLE DEPTH 12 (Meters) WIRE ANGLE 0°
WATER COLOR -- (Code) WEATHER 01 (Code) SEA 2 (Code) SWELL 090 (Direction) ° T. 4 ft.
4 (Period) sec. CLOUDS Cu (Type) 1 (Amount) TEMP. 83.9 (Dry) °F. 77.0 (Wet) °F.
BAR. 30.03 in. REL. HUM. 73 % WIND 090 (Direction) ° T. 3 (Force) VIS.9 (Code)

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	25.81	33.53	0	25.81	33.53	22.01
6	25.58	33.49	10	25.39	33.49	22.11
12	25.30	33.49				

STATION NO. 2-1B-5

DATE 6 6 1951 (Day Month Year) LAT. 27° 04' N. LONG. 97° 16' W.

TIME 0130 (GCT) DEPTH 11 (Faths.) MAX. SAMPLE DEPTH 12 (Meters) WIRE ANGLE 3 °

WATER COLOR -- (Code) WEATHER 01 (Code) SEA 2 (Code) SWELL 090 (Direction) ° T. 6 (Hgt.) ft.

5 (Period) sec. CLOUDS Sc Ac (Type) 1, 1 (Amount) TEMP. 79.6 (Dry) °F. 75.7 (Wet) °F.

BAR. 29.97 in. REL. HUM. 83 % WIND 090 (Direction) ° T. 3 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.18	34.02	0.2	0.3	1.8	0.5
6	24.75	34.02	0.3	0.2	1.2	0.0
12	24.65	34.07	0.0	0.2	0.9	0.0

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	25.18	34.02	22.57
10	24.66	34.05	22.75

STATION NO. 2-1B-6

DATE 6 6 1951 (Day Month Year) LAT. 26° 25' N. LONG. 97° 05' W.
TIME 0710 (GCT) DEPTH 11 (Faths.) MAX. SAMPLE DEPTH 12 (Meters) WIRE ANGLE 0 °
WATER COLOR -- (Code) WEATHER 00 (Code) SEA 2 (Code) SWELL 090 ° (Direction) T. 5 ft. (Hgt.)
-- sec. (Period) CLOUDS -- (Type) -- (Amount) TEMP. 78.8 °F. (Dry) 76.3 °F. (Wet)
BAR. 29.95 in. REL. HUM. 89 % WIND 090 ° (Direction) T. 3 (Force) VIS. 8 (Code)

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	25.35	35.97	0	25.35	35.97	23.99
6	25.34	35.95	10	23.62	35.93	24.48
12	23.61	35.91				

STATION NO. 2-1B-7

DATE 6 6 1951 (Day Month Year) LAT. 25° 45' N. LONG. 97° 00' W.
TIME 1227 (GCT) DEPTH 15 (Faths.) MAX. SAMPLE DEPTH 20 (Meters) WIRE ANGLE 0 °
WATER COLOR -- (Code) WEATHER 01 (Code) SEA 3 (Code) SWELL 100 ° (Direction) T. 6 ft. (Hgt.)
3 sec. (Period) CLOUDS Cu (Type) 1 (Amount) TEMP. 79.1 °F. (Dry) 76.6 °F. (Wet)
BAR. 29.93 in. REL. HUM. 89% WIND 100 ° (Direction) T. 3 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.56	36.08	0.0	0.3	0.6[a]	0.0
10	23.12	35.95	0.1	0.0	1.6	0.1
20	21.30	36.38	0.4	3.9	0.6	0.8

(a) Green carbohydrates.

STATION NO. 2-1B-7

VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	σ_t
0	24.56	36.08	24.31
10	23.12	35.95	24.64
20	21.30	36.38	25.48

STATION NO. 2-1B-8

DATE 6 6 1951 LAT. 25° 09' N. LONG. 97° 19' W.
Day Month Year
TIME 1814 DEPTH 9 MAX. SAMPLE DEPTH 12 WIRE ANGLE 3 °
GCT Faths. Meters
WATER COLOR -- WEATHER 01 SEA 3 SWELL 135 ° T. 7 ft.
Code Code Code Direction Hgt.
4 sec. CLOUDS Cu 1 TEMP. 81.6 °F. 77.7 °F.
Period Type Amount Dry Wet
BAR. 29.94 in. REL. HUM. 84 % WIND 135 ° T. 4 VIS. 8
Direction Force Code

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	25.31	36.53	0	25.31	36.53	24.42
6	25.25	36.45	10	24.00	36.48	24.78
12	22.44	36.55				

STATION NO. 2-1B-9

DATE 6 6 1951 LAT. 24° 33' N. LONG. 97° 31' W.
Day Month Year

TIME 2336 DEPTH 14 MAX. SAMPLE DEPTH 18 WIRE ANGLE 2°
GCT Faths. Meters

WATER COLOR - WEATHER 01 SEA 3 SWELL 135 ° T. 6 ft.
Code Code Code Direction Hgt.

4 sec. CLOUDS Ci Sc 1 1 TEMP. 84.5 °F. 79.0 °F.
Period Type Amount Dry Wet

BAR. 29.83 in. REL. HUM. 78 % WIND 135 ° T. 4 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.56	36.35	0.0	0.0	1.6	0.9
9	24.59	36.38	0.5	0.2	0.2	0.0
18	21.49	36.49	0.0	0.1	0.4	0.4

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	25.56	36.35	24.21
10	24.50	36.38	24.56
20	(21.20)	(36.60)	25.67

() Extrapolated values

STATION NO. 2-1B-10

DATE 7 6 1951 LAT. 23° 55' N. LONG. 97° 36' W.
Day Month Year
TIME 0517 DEPTH 10 MAX. SAMPLE DEPTH 12 WIRE ANGLE 3 °
GCT Faths. Meters
WATER COLOR -- WEATHER 00 SEA 2 SWELL 135 ° T. 4 ft.
Code Code Code Direction Hgt.
4 sec. CLOUDS -- --- TEMP. 79.2 °F. 76.0 °F.
Period Type Amount Dry Wet
BAR. 29.86 in. REL. HUM 87 % WIND 135 ° T. 4 VIS. 8
Direction Force Code

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	25.19	36.42	0	25.19	36.42	24.38
6	24.64	36.42	10	24.00	36.58	24.86
12	23.15	36.62				

STATION NO. 2-1B-11

DATE 7 6 1951 LAT. 23° 18' N. LONG. 97° 38' W.
Day Month Year
TIME 1144 DEPTH 17 MAX. SAMPLE DEPTH 32 WIRE ANGLE 6°
GCT Faths. Meters
WATER COLOR -- WEATHER 02 SEA 2 SWELL 135 ° T. 5 ft.
Code Code Code Direction Hgt.
3 sec. CLOUDS Cu 7 TEMP. 78.8 °F. 76.9 °F.
Period Type Amount Dry Wet
BAR. 29.82 in. REL. HUM. 91 % WIND 135 ° T. 2 VIS. 7
Direction Force Code

OBSERVED VALUES						
Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.21	36.33	0.4	0.0	1.9	0.2
16	23.97	36.42	0.2	0.4	1.4	0.8
32	21.78	36.49	0.9	2.4	1.2	0.1

STATION NO. 2-1B-11

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	25.21	36.33	24.30
10	24.60	36.39	24.53
20	23.59	36.45	24.88
30	22.10	36.48	25.33

STATION NO. 2-1B-12

DATE 7 6 1951 LAT. 22° 31' N. LONG. 97° 45' W.
Day Month Year

TIME 1905 DEPTH 12 MAX. SAMPLE DEPTH 14 WIRE ANGLE 1 °
GCT Faths. Meters

WATER COLOR -- WEATHER 01 SEA 2 SWELL 130 ° T. 4 ft.
Code Code Code Direction Hgt.

3 sec. CLOUDS Cu Sc 1 1 TEMP. 84.5 °F. 80.0°F.
Period Type Amount Dry Wet

BAR. 29.84 in. REL. HUM. 82 % WIND 130 ° T. 7 VIS. 8
Direction Force Code

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	26.15	35.34	0	26.15	35.34	23.26
7	23.61	36.35	10	23.10	36.40	24.99
14	22.34	36.56				

STATION NO. 2-1B-13

DATE 8 6 1951 LAT. 21° 53' N. LONG. 97° 34' W.
Day Month Year
TIME 0032 DEPTH 10 MAX. SAMPLE DEPTH 12 WIRE ANGLE 6 °
GCT Faths. Meters
WATER COLOR -- WEATHER 01 SEA 2 SWELL 090 ° T. 5 ft.
Code Cu Code Code Direction Hgt.
4 sec. CLOUDS Ci,Sc 1,2,1 TEMP. 83.0 °F. 78.7 °F.
Period Type Amount Dry Wet
BAR. 29.74 in. REL. HUM. 83 % WIND 090 ° T. 4 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.09	35.68	0.0	0.0	1.2	0.0
6	24.37	36.38	0.4	0.1	2.0	0.2
12	22.18	36.55	0.0	0.2	1.7	1.2

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	26.09	35.68	23.54
10	22.50	36.51	25.24

STATION NO. 2-1B-14

DATE 8 6 1951 (Day Month Year) LAT. 21° 18' N. LONG. 97° 14' W.
TIME 0715 (GCT) DEPTH 13 (Faths.) MAX. SAMPLE DEPTH 14 (Meters) WIRE ANGLE 0 °
WATER COLOR -- (Code) WEATHER 01 (Code) SEA 2 (Code) SWELL 135 ° T. (Direction) 3 ft. (Hgt.)
4 sec. (Period) CLOUDS Cu (Type) 2 (Amount) TEMP. 80.8 °F. (Dry) 78.0 °F. (Wet)
BAR. 29.82 in. REL. HUM. 88 % WIND 135 ° T. (Direction) 2 (Force) VIS. 8 (Code)

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	25.91	35.71	0	25.91	35.71	23.62
7	25.35	36.00	10	24.60	36.25	24.43
14	22.46	36.45				

STATION NO. 2-1B-15

DATE 8 6 1951 (Day Month Year) LAT. 20° 41' N. LONG. 96° 58' W.
TIME 1316 (GCT) DEPTH 20 (Faths.) MAX. SAMPLE DEPTH 30 (Meters) WIRE ANGLE 0°
WATER COLOR -- (Code) WEATHER 02 (Code) SEA 2 (Code) SWELL 090 ° T. (Direction) 5 ft. (Hgt.)
3 sec. (Period) CLOUDS Cu Ci (Type) 1,6,1 (Amount) TEMP. 81.3 °F. (Dry) 77.4 °F. (Wet)
BAR. 29.83 in. REL. HUM. 84 % WIND 090 ° T. (Direction) 3 (Force) VIS. 7 (Code)

OBSERVED VALUES						
Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.78	33.77	0.1	---	1.8	---
15	22.14	36.64	0.0	0.4	0.0	0.0
30	22.00	36.65	0.0	0.6	1.0	0.6

STATION NO. 2-1B-15

VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	σ_t
0	25.78	33.77	22.20
10	25.00	35.60	23.82
20	23.60	36.65	25.03
30	22.00	36.65	25.49

STATION NO. 2-1B-16

DATE 8 6 1951 LAT. 20° 08' N. LONG. 96° 35' W.
Day Month Year

TIME 1859 DEPTH 15 MAX. SAMPLE DEPTH 20 WIRE ANGLE 6 °
GCT Faths. Meters

WATER COLOR -- WEATHER 01 SEA 2 SWELL 110 ° T. 6 ft.
Code Ci Code Code Direction Hgt.

7 sec. CLOUDS Sc Cu 3,1,2 TEMP. 83.9 °F. 80.0 °F.
Period Type Amount Dry Wet

BAR. 29.84 in. REL. HUM. 84 % WIND 110 ° T. 3 VIS. 7
Direction Force Code

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	25.64	36.47	0	25.64	36.47	24.28
10	22.53	36.67	10	22.53	36.67	25.35
20	21.48	36.56	20	21.48	36.56	25.57

STATION NO. 2-1B-17

DATE 8 6 1951 LAT. 19° 43' N. LONG. 96° 20' W.
Day Month Year

TIME 2341 DEPTH 30 MAX. SAMPLE DEPTH 49 WIRE ANGLE 8 °
GCT Faths. Meters

WATER COLOR -- WEATHER 01 SEA 2 SWELL 090 ° T. 5 ft.
Code Code Code Direction Hgt.

5 sec. CLOUDS Cu Ci 1,1 TEMP. 83.5 ° F. 79.6 °F.
Period Type Amount Dry Wet

BAR. 29.78 in. REL. HUM. 84 % WIND 090 ° T. 4 VIS. 8
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	28.14	36.38	0.0	0.1	2.4	0.0
25	23.63	36.78	0.0	0.1	0.8	0.2
49	21.74	36.60	0.1	0.4	0.2	0.4

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	28.14	36.38	23.41
10	26.80	36.60	24.01
20	25.50	36.77	24.54
30	23.05	36.77	25.28
50	21.70	36.59	25.53

STATION NO. 2-1B-18

DATE 9 6 1951 LAT. 19° 21' N. LONG. 95° 58' W.
Day Month Year

TIME 0436 DEPTH 65 MAX. SAMPLE DEPTH 74 WIRE ANGLE 8 °
GCT Faths. Meters

WATER COLOR - WEATHER 00 SEA 2 SWELL 090 ° T. 6 ft.
Code Code Code Direction Hgt.

5 sec. CLOUDS -- -- TEMP. 82.3 °F. 78.8 °F.
Period Type Amount Dry Wet

BAR. 29.85 in. REL. HUM. 86 % WIND 090 °T. 4 VIS. 8
Direction Force Code

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	27.83	35.66	0	27.83	35.66	22.97
10	27.11	---	10	27.11	36.23	23.63
25	24.69	36.56	20	25.30	36.52	24.42
49	22.68	36.69	30	24.10	36.62	24.86
74	21.35	36.51	50	22.57	36.69	25.36
			75	21.30	36.51	25.58

STATION NO. 2-1B-19

DATE 9 6 1951 (Day Month Year) LAT. 20° 02' N. LONG. 96° 00' W.

TIME 1257 (GCT) DEPTH 950 (Faths.) MAX. SAMPLE DEPTH 1335 (Meters) WIRE ANGLE 12°

WATER COLOR - (Code) WEATHER 01 (Code) SEA 2 (Code) SWELL 090 (Direction) ° T. 6 (Hgt.) ft.

6 (Period) sec. CLOUDS Ci Sc (Type) 2,4,1 (Amount) TEMP. 83.0 (Dry) °F. 79.1 (Wet) °F.

BAR. 29.90 in. REL. HUM. 84 % WIND 090 (Direction) ° T. 3 (Force) VIS. 9 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.12	36.60	0.0	0.2	1.0	0.1
10	26.93	36.62				
29	24.12	36.82				
58	22.90	36.83				
87	21.91	36.74				
116	19.91	36.60				
175	16.63	36.33				
232	14.45	36.00				
348	10.86	35.50				
458	8.94	35.07				
572	7.30	35.05	1.6	78.2	0.4	0.3
682	6.19	34.97				
907	---	36.60				
1124	11.99	35.81				
1335	3.92	35.30	2.0	63.8	1.2	0.0

STATION NO. 2-1B-19

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	27.12	36.60	23.91
10	26.93	36.62	23.98
20	25.95	36.79	24.42
30	24.10	36.82	25.01
50	23.20	36.83	25.28
75	22.25	36.77	25.51
100	21.35	36.67	25.69
150	17.98	36.48	26.43
200	15.49	36.18	26.79
250	13.43	35.93	27.04
300	12.00	35.72	27.17
400	9.95	35.23	27.16
500	8.39	35.05	27.27
600	6.99	35.04	27.47
700	6.12	34.96	27.53

STATION NO. 2-1B-20

DATE 9 6 1951 LAT. 20° 40' N. LONG. 96° 01' W.
Day Month Year

TIME 2000 DEPTH 1030 MAX. SAMPLE DEPTH 1379 WIRE ANGLE 8 °
GCT Faths. Meters

WATER COLOR - Code WEATHER 01 Code SEA 2 Code SWELL 090 ° T. Direction - ft. Hgt.

--- sec. Period CLOUDS Cec Ci 1,1 Type Amount TEMP. 84.7 °F. Dry 79.3 °F. Wet

BAR. 29.93 in. REL. HUM. 78 % WIND 135 ° T. Direction 3 Force VIS.9 Code

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	27.49	36.67	0	27.49	36.67	23.84
10	27.06	36.65	10	27.06	36.65	23.96
30	25.76	36.80	20	26.49	36.69	24.17
59	22.96	36.74	30	25.76	36.80	24.49
89	21.92	36.73	50	23.60	36.74	25.10
118	19.87	36.69	75	22.45	36.73	25.42
178	15.45	36.24	100	21.12	36.71	25.78
237	13.44	35.92	150	17.28	36.45	26.58
357	10.77	35.52	200	14.60	36.10	26.93
472	9.19	35.43	250	13.05	35.87	27.07
591	7.49	35.07	300	11.91	35.65	27.13
706	6.15	34.70	400	10.14	35.50	27.34
939	4.92	34.94	500	8.82	35.35	27.44
1164	4.35	34.99	600	7.35	35.06	27.44
1379	---	35.01	700	6.20	35.00	27.55
			800	5.53	34.96	27.60
			1000	4.73	34.95	27.69
			1200	(4.30)	35.00	27.78

() Extrapolated values.

STATION NO. 2-1B-21

DATE 10 6 1951 LAT. 21° 15' N. LONG. 96° 01' W.
Day Month Year

TIME 0430 DEPTH 1140 MAX. SAMPLE DEPTH 1164 WIRE ANGLE 12°
GCT Fathoms. Meters

WATER COLOR - WEATHER 00 SEA 2 SWELL 090 ° T. - ft.
Code Code Code Direction Hgt.

4 sec. CLOUDS -- -- TEMP. 81.5 °F. 78.7 °F.
Period Type Amount Dry Wet

BAR. 29.92 in. REL. HUM. 88 % WIND 135 ° T. 3 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.26	36.73	0.1	0.1	4.3	0.4
10	27.26	36.73				
30	27.04	36.78				
59	24.03	36.73				
89	21.65	36.67				
118	18.92	36.56				
178	15.70	36.15				
237	13.48	35.79				
356	10.71	35.37				
471	8.81	35.10				
590	7.09	34.97				
704	6.04	34.97	1.9	82.1	1.6[a]	0.1
939	4.88	35.01				
1164	4.36	34.88	1.8	49.6	3.6	0.2

(a) Green carbohydrates.

STATION NO. 2-1B-21

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	27.26	36.73	23.96
10	27.26	36.73	23.96
20	27.20	36.77	24.01
30	27.04	36.78	24.07
50	26.20	36.75	24.31
75	22.88	36.70	25.28
100	20.10	36.63	26.00
150	16.95	36.34	26.57
200	14.95	36.00	26.77
250	13.18	35.74	26.95
300	11.98	35.55	27.04
400	10.00	35.26	27.17
500	8.47	35.04	27.26
600	7.02	34.97	27.41
700	6.11	34.97	27.54
800	5.48	34.99	27.63
1000	4.71	(35.01)	27.74

() Extrapolated values.

STATION NO. 2-1B-22

DATE 10 6 1951 LAT. 22° 00' N. LONG. 96° 00' W.
Day Month Year

TIME 1258 DEPTH 1400 MAX. SAMPLE DEPTH 1625 WIRE ANGLE 25°
GCT Faths. Meters

WATER COLOR - WEATHER 01 SEA 2 SWELL 090 ° T. 8 ft.
Code Code Code Direction Hgt.

7 sec. CLOUDS Ci 1 TEMP. 81.5 °F. 77.4 °F.
Period Type Amount Dry Wet

BAR. 29.93 in. REL. HUM. 84 % WIND 090 ° T. 3 VIS. 9
Direction Force Code

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	27.33	36.73	0	27.33	36.73	23.94
13	27.31	36.74	10	27.31	36.74	23.95
31	24.61	36.62	20	26.90	36.68	24.04
68	22.56	36.74	30	25.01	36.62	24.58
100	21.39	36.56	50	23.65	36.72	25.07
136	18.94	36.64	75	22.30	36.73	25.47
205	15.45	36.29	100	21.39	36.70	25.70
272	13.00	35.90	150	18.15	36.62	26.49
400	9.94	35.41	200	15.77	36.32	26.83
535	7.78	35.10	250	13.95	36.02	27.00
658	6.46	34.92	300	12.55	35.79	27.11
792	5.49	34.96	400	9.94	35.41	27.30
1057	5.90	34.92	500	8.35	35.18	27.38
1333	4.88	34.92	600	6.99	34.97	27.42
1625	4.31	34.97	700	6.13	34.94	27.51
			800	5.48	34.96	27.61
			1000	5.05	34.92	27.63
			1200	4.92	34.92	27.64
			1500	4.58	34.95	27.71

STATION NO. 2-1B-23

DATE 10 6 1951 (Day Month Year) LAT. 22° 42' N. LONG. 96° 00' W.
TIME 2155 (GCT) DEPTH 1400 (Faths.) MAX. SAMPLE DEPTH 753 (Meters) WIRE ANGLE 23 °
WATER COLOR - (Code) WEATHER 01 (Code) SEA 2 (Code) SWELL 090 (Direction) ° T. - (Hgt.) ft.
--- (Period) sec. CLOUDS Cu (Type) 6 (Amount) TEMP. 82.6 (Dry) °F. 79.2 (Wet) °F.
BAR. 29.90 in. REL. HUM. 86 % WIND 090 (Direction) ° T. 3 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.53	36.80	0.0	0.2	0.2	0.4
14	27.10	36.85				
32	23.91	36.80				
69	23.01	36.76				
101	22.30	36.78				
137	21.18	36.71				
202	17.27	36.35				
268	14.32	36.00				
388	10.80	35.35				
511	8.58	35.08				
627	7.09	34.92				
753	6.09	34.92	2.2	78.8	1.2	1.4

STATION NO. 2-1B-23

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	27.53	36.80	23.92
10	27.25	36.85	24.05
20	26.10	36.84	24.41
30	24.52	36.81	24.87
50	23.60	36.77	25.12
75	22.87	36.76	25.32
100	22.32	36.78	25.50
150	20.20	36.62	25.96
200	17.50	36.37	26.46
250	15.40	36.09	26.74
300	13.30	35.73	26.91
400	10.57	35.32	27.12
500	8.83	35.10	27.24
600	7.47	34.93	27.32
700	6.49	34.92	27.45
800	(5.90)	(34.92)	27.52

Extrapolated values.

STATION NO. 2-1B-24

DATE 11 6 1951 LAT. 23° 20'N. LONG. 95° 57' W.
Day Month Year

TIME 0508 DEPTH 1400 MAX. SAMPLE DEPTH 1718 WIRE ANGLE 12°
GCT Faths. Meters

WATER COLOR -- WEATHER 00 SEA 2 SWELL 090 ° T. 4 ft.
Code Code Code Direction Hgt.

7 sec. CLOUDS -- --- TEMP. 82.3 °F. 79.3 °F.
Period Type Amount Dry Wet

BAR. 29.85 in. REL. HUM. 88 % WIND 135 ° T. 2 VIS. 8
Direction Force Code

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	27.49	36.94	0	27.49	36.94	24.04
15	27.15	36.96	10	27.25	36.95	24.13
34	23.59	36.93	20	25.50	36.95	24.68
73	22.87	37.10	30	23.95	36.93	25.14
108	22.44	36.89	50	23.35	36.98	25.35
147	21.17	36.73	75	22.90	37.10	25.57
221	17.40	36.53	100	22.55	36.97	25.58
293	14.98	36.36	150	21.05	36.72	25.81
432	11.02	35.48	200	19.00	36.60	26.26
578	8.80	35.12	250	16.51	36.48	26.78
714	7.19	34.92	300	14.53	36.34	27.13
858	5.96	35.03	400	11.80	35.67	27.17
1139	4.68	34.74	500	9.96	35.28	27.20
1423	4.25	35.05	600	8.60	35.08	27.26
1718	4.20	35.01	700	7.37	34.93	27.33
			800	6.41	34.85	27.40
			1000	5.25	34.76	27.48
			1200	4.61	34.78	27.57
			1500	4.25	35.05	27.82

STATION NO. 2-1B-25

DATE 11 6 1951 LAT. 24° 03' N. LONG. 96° 01' W.
Day Month Year

TIME 1252 DEPTH 1260 MAX. SAMPLE DEPTH 1638 WIRE ANGLE 22 °
GCT Faths. Meters

WATER COLOR -- WEATHER 01 SEA 2 SWELL 135 ° T. 6 ft.
Code Code Code Direction Hgt.

7 sec. CLOUDS Cu, Ci 3.1 TEMP. 81.3 °F. 77.2 °F.
Period Type Amount Dry Wet

BAR. 29.81 in. REL. HUM. 84 % WIND 135 ° T. 3-4 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.34	36.78	0.0	0.2	1.4	0.0
14	27.10	36.82				
32	23.41	36.87				
68	22.76	36.83				
99	22.06	36.89				
136	20.74	36.55				
204	17.72	36.44				
268	16.16	36.35				
394	13.26	35.79				
530	10.36	35.43				
657	8.22	35.17				
795	6.81	35.25	1.7	69.2	3.3	0.0
1066	4.83	34.81				
1346	4.26	34.79				
1638	4.16	35.79	1.6	57.0	1.6	0.8

STATION NO. 2-1B-25

VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	σ_t
0	27.34	36.78	23.97
10	27.20	36.80	24.03
20	27.00	36.84	24.12
30	24.00	36.87	25.08
50	23.09	36.86	25.34
75	22.55	36.84	25.48
100	22.00	36.89	25.67
150	20.05	36.52	25.93
200	17.98	36.45	26.40
250	16.58	36.38	26.69
300	15.35	36.21	26.84
400	13.00	35.78	27.01
500	10.95	35.50	27.19
600	9.17	35.27	27.32
700	7.79	35.11	27.41
800	6.80	34.99	27.46
1000	5.33	34.83	27.52
1200	4.38	34.79	27.60

STATION NO. 2-1B-26

DATE 11 6 1951 LAT. 24° 45' N. LONG. 96° 00' W.
Day Month Year 30°
TIME 1950 DEPTH 1300 MAX. SAMPLE DEPTH 2530 WIRE ANGLE 27 °
GCT Faths. Meters
WATER COLOR -- WEATHER 01 SEA 3 SWELL 135 ° T. 10 ft.
Code Code Code Direction Hgt.
6 sec. CLOUDS Cu Ci 1.1 TEMP. 83.0 °F. 78.0 °F.
Period Type Amount Dry Wet
BAR. 29.82 in. REL. HUM. 80 % WIND 135 ° T. 4 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
Cast I						
0	27.57	36.53				
14	27.32	36.53				
31	26.04	36.73				
65	23.02	36.74				
95	21.10	36.67				
128	18.74	36.45				
188	15.36	36.13				
250	13.25	35.71				
369	10.03	35.25				
497	7.81	34.97				
619	6.46	35.01				
753	5.49	35.01				
1019	4.76	35.23				
1297	4.33	35.14				
1588	4.22	35.12				
Cast II						
1655	4.18	35.07	1.6	75.8	2.2	1.0
1845	4.20	35.07	1.6	24.6	1.5[a]	0.2
2134	4.21	35.05	1.6	64.1	2.0[a]	0.2
*2530	4.20	35.01	2.1	48.8	1.5	0.4

* Cloudy sample - centrifuged
(a) Green carbohydrates.

STATION NO. 2-1B-26

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	27.57	36.53	23.71
10	27.45	36.53	23.75
20	27.12	36.54	23.86
30	26.50	36.73	24.20
50	24.50	36.74	24.83
75	22.30	36.72	25.46
100	20.50	36.65	25.90
150	17.63	36.32	26.39
200	14.80	36.04	26.83
250	13.25	35.71	26.91
300	11.83	35.50	27.03
400	9.48	35.16	27.18
500	7.82	34.97	27.30
600	6.60	35.01	27.50
700	5.82	35.01	27.60
800	5.32	35.04	27.69
1000	4.81	35.22	27.89
1200	4.47	35.17	27.89
1500	4.21	35.13	27.89
2000	4.20	35.06	27.83
2500	4.20	35.01	27.79

STATION NO. 2-1B-27

DATE 12 6 1951 LAT. 25° 20' N. LONG. 96° 00' W.
Day Month Year

TIME 0425 DEPTH 550 MAX. SAMPLE DEPTH 916 WIRE ANGLE 8 °
GCT Faths. Meters

WATER COLOR - WEATHER 01 SEA 2 SWELL 135 ° T. - ft.
Code Code Code Direction Hgt.

-- sec. CLOUDS Cu 4 TEMP. 80.7 °F. 78.3 °F.
Period Type Amount Dry Wet

BAR. 29.76 in. REL. HUM. 89 % WIND 135 ° T. 4-5 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.08	36.06	1.6	0.2	0.3	0.4
10	27.08	36.22				
25	25.12	36.45				
50	21.45	36.60				
75	20.84	36.87				
99	19.34	36.69				
154	15.73	36.22				
203	13.70	35.91				
303	10.40	35.26				
408	7.72	34.96				
508	6.67	34.96				
612	6.00	34.99				
711	5.48	34.96				
816	5.06	35.08	0.2	9.6	0.9	0.4
916	4.73	35.16	0.0	75.1	1.2	0.2

STATION NO. 2-1B-27

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	27.08	36.06	23.51
10	27.08	36.22	23.63
20	25.90	36.41	24.15
30	23.92	36.49	24.81
50	21.45	36.60	25.61
75	20.84	36.87	25.98
100	19.29	36.69	26.25
150	15.85	36.25	26.76
200	13.81	35.93	26.96
250	12.10	35.61	27.06
300	10.43	35.29	27.12
400	7.88	34.97	27.29
500	6.79	34.96	27.44
600	6.04	34.99	27.56
700	5.55	34.96	27.60
800	5.12	35.06	27.73
1000	(4.60)	(35.17)	27.88

() Extrapolated values.

STATION NO. 2-1B-28

DATE 12 6 1951 LAT. 26° 00' N. LONG. 96° 02' W.
Day Month Year

TIME 1040 DEPTH 490 MAX. SAMPLE DEPTH 687 WIRE ANGLE 32 °
GCT Faths. Meters

WATER COLOR - WEATHER 01 SEA 3 SWELL 135 ° T. 12 ft.
Code Code Code Direction Hgt.

5 sec. CLOUDS Cu 5 TEMP. 81.7 °F. 79.0 °F.
Period Type Amount Dry Wet

BAR. 29.77 in. REL. HUM. 89 % WIND 135 ° T. 5 VIS. 9
Direction Force Code

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	27.22	36.26	0	27.22	36.26	23.62
9	27.23	36.33	10	27.23	36.34	23.67
21	26.64	36.44	20	26.80	36.44	23.89
43	24.01	36.64	30	26.28	36.52	24.11
64	21.99	36.76	50	23.30	36.70	25.15
85	20.94	36.74	75	21.35	36.75	25.75
130	18.27	36.65	100	19.99	36.71	26.09
169	16.36	36.42	150	17.43	36.55	26.62
207	14.74	36.27	200	15.15	36.29	26.95
244	13.47	35.79	250	13.21	35.75	26.95
324	11.16	35.52	300	11.72	35.57	27.10
405	9.57	35.41	400	9.62	35.42	27.36
494	8.13	35.16	500	8.10	35.15	27.40
585	7.14	35.01	600	7.00	35.00	27.44
687	6.29	34.94				

STATION NO. 2-1B-31

DATE 13 6 1951 LAT. 28° 00' N. LONG. 96° 00' W.
Day Month Year

TIME 0425 DEPTH 25 MAX. SAMPLE DEPTH 40 WIRE ANGLE 5 °
GCT Faths. Meters

WATER COLOR - WEATHER 03 SEA 2 SWELL 045 ° T. 7 ft.
Code Code Code Direction Hgt.

5 sec. CLOUDS - 10 TEMP. 79.6 °F. 75.4 °F.
Period Type Amount Dry Wet

BAR. 29.85 in. REL. HUM. 82 % WIND 045 ° T. 4-5 VIS. 7
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.15	36.44	0.1	0.4	0.6	0.0
20	25.32	33.21	0.0	0.2	0.8	0.8
40	21.51	32.28	0.5	0.0	2.8	0.8

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	27.15	32.38	20.72
10	26.50	32.92	21.33
20	25.32	33.21	21.92
30	23.50	34.42	23.37

STATION NO. 2-1B-32

DATE 18 6 1951 LAT. 29° 34' N. LONG. 94° 00' W.
Day Month Year
TIME 0745 DEPTH 5 MAX. SAMPLE DEPTH 5 WIRE ANGLE 0 °
GCT Faths. Meters
WATER COLOR - WEATHER 01 SEA 2 SWELL 180 ° T. 4 ft.
Code Code Code Direction Hgt.
4 sec. CLOUDS Cu 4 TEMP. 82.6 ° F. 78.5 °F.
Period Type Amount Dry Wet
BAR. 29.87 in. REL. HUM. 84 % WIND 180 ° T. 2 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.55	32.00	0.4	1.4	1.6	0.5
5	27.80	32.00	0.6	0.6	0.0	0.4

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	27.55	32.00	20.31

STATION NO. 2-1B-33

DATE 19 6 1951 LAT. 28° 44' N. LONG. 93° 56' W.
Day Month Year
TIME 1519 DEPTH 15 MAX. SAMPLE DEPTH 20 WIRE ANGLE 0 °
GCT Faths. Meters
WATER COLOR - WEATHER 01 SEA 1 SWELL 180 °T. 4 ft.
Code Code Code Direction Hgt.
4 sec. CLOUDS Cu 3 TEMP. 85.1 °F. 80.0 °F.
Period Type Amount Dry Wet
BAR. 29.94 in. REL. HUM. 81 % WIND 180 ° T. - VIS. 8
Direction Force Code

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	28.17	---	0	28.17	---	---
10	27.77	31.92	10	27.77	31.92	20.18
20	27.26	32.27	20	27.26	32.27	20.61

STATION NO. 2-1B-34

DATE 19 6 1951 LAT. 28° 00' N. LONG. 94° 00' W.
Day Month Year
TIME 2105 DEPTH 44 MAX. SAMPLE DEPTH 75 WIRE ANGLE 0°
GCT Faths. Meters
WATER COLOR -- WEATHER 01 SEA 2 SWELL 180 ° T. 8 ft.
Code Code Code Direction Hgt.
-- sec. CLOUDS Cu 2 TEMP. 80.5 °F. 76.3 °F.
Period Type Amount Dry Wet
BAR. 29.89 in. REL. HUM. 83 % WIND 180 ° T. 2 VIS. 8
Direction Force Code

OBSERVED VALUES						
Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	28.81	31.36	0.0	0.4	0.9	0.3
10	27.77	33.86				
25	24.21	34.88	0.0	0.4	0.8	---
50	21.33	36.09				
75	19.89	36.24	0.1	3.6	1.0	0.2

STATION NO. 2-1B-34

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	28.81	31.36	19.42
10	27.77	33.86	21.63
20	25.50	34.65	22.95
30	24.00	35.12	23.75
50	21.33	36.09	25.25
75	19.89	36.24	25.75

STATION NO. 2-1B-35

DATE 20 6 1951 (Day Month Year) LAT. 27° 20' N. LONG. 94° 00' W.
TIME 0350 (GCT) DEPTH 450 (Faths.) MAX. SAMPLE DEPTH 71 (Meters.) WIRE ANGLE 17 °
WATER COLOR - (Code) WEATHER 01 (Code) SEA 2 (Code) SWELL 155 (Direction) ° T. 4 (Hgt.) ft.
5 (Period) sec. CLOUDS Ac Cu (Type) 1,2 (Amount) TEMP. 84.0 (Dry) °F. 79.4 (Wet) °F.
BAR. 29.83 in. REL. HUM. 80 % WIND 180 (Direction) ° T. - (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	28.32	35.93	0.0	0.5	2.1	0.0
9	27.93	36.44				
23	27.38	36.60				
47	23.38	36.61				
71	21.86	36.73	0.0	0.2	0.3	0.4

STATION NO. 2-1B-35

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	28.32	35.93	23.01
10	27.90	36.44	23.53
20	27.20	36.59	23.87
30	26.05	36.60	24.25
50	23.20	36.62	25.12
75	(21.70)	(36.75)	25.65

() Extrapolated values

STATION NO. 2-1B-36

DATE 20 6 1951 LAT. 26° 41 ' N. LONG. 94° 04' W.
Day Month Year

TIME 1135 DEPTH 670 MAX. SAMPLE DEPTH 1005 WIRE ANGLE 30°
GCT Faths. Meters

WATER COLOR - WEATHER 02 SEA 2 SWELL 150 ° T. 8 ft.
Code Code Code Direction Hgt.

4 sec. CLOUDS Cu Ac 2,2 TEMP. 81.4 °F. 77.0 °F.
Period Type Amount Dry Wet

BAR. 29.87 in. REL. HUM. 84 % WIND 180 ° T. - VIS. 8
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.73	36.27	0.0	0.6	0.6	0.3
8	27.75	36.26				
21	26.26	36.67				
42	23.66	36.76				
63	21.96	36.80				
82	21.50	36.67				
125	19.42	36.56				
163	16.98	36.36				
235	13.83	35.90				
312	11.41	35.50				
389	---	35.88				
471	8.91	35.08	1.8	90.0	2.9	0.0
637	6.39	34.96				
812	5.44	34.97				
1005	4.71	34.99	1.6	80.1	1.5	0.1

STATION NO. 2-1B-36

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	27.73	36.27	23.46
10	27.74	36.26	23.45
20	27.73	36.60	23.71
30	26.00	36.73	24.36
50	23.00	36.79	25.31
75	21.70	36.79	25.68
100	21.00	36.62	25.74
150	17.50	36.45	26.52
200	15.10	36.10	26.81
250	13.39	35.79	26.94
300	11.91	35.55	27.05
400	9.50	35.28	27.27
500	7.80	35.05	27.36
600	6.66	34.97	27.46
700	6.00	34.96	27.54
800	5.48	34.97	27.62
1000	4.78	34.99	27.71

STATION NO. 2-1B-37

DATE 20 6 1951 LAT. 26° 00' N. LONG. 94° 00' W.
Day Month Year

TIME 2134 DEPTH 1680 MAX. SAMPLE DEPTH 1688 WIRE ANGLE 22 °
GCT Faths. Meters

WATER COLOR - WEATHER 04 SEA 3 SWELL 135 ° T. 5 ft.
Code Code Code Direction Hgt.

4 sec. CLOUDS - - TEMP. 85.8 °F. 80.7 °F.
Period Type Amount Dry Wet

BAR. 29.90 in. REL. HUM. 80 % WIND 135 ° T. - VIS. 7
Direction Force Code

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	28.26	36.44	0	28.26	36.44	23.41
14	27.94	36.44	10	28.10	36.44	23.47
32	24.23	36.80	20	27.00	36.45	23.83
69	21.69	36.76	30	24.30	36.80	24.93
101	20.58	36.76	50	22.00	36.78	25.59
138	17.70	36.53	75	21.30	36.76	25.77
207	13.66	35.91	100	20.71	36.76	25.93
276	11.94	35.61	150	16.40	36.35	26.71
407	9.12	35.01	200	13.88	35.95	26.96
547	7.40	35.19	250	12.60	35.72	27.05
679	6.28	35.08	300	11.50	35.54	27.12
821	5.41	35.12	400	9.30	35.38	27.39
1102	4.50	35.12	500	7.95	35.25	27.50
1392	4.25	35.17	600	6.83	35.14	27.57
1688	4.16	35.14	700	6.11	35.08	27.62
			800	5.57	35.11	27.71
			1000	4.77	35.12	27.82
			1200	4.35	35.14	27.88
			1500	4.22	35.17	27.92

STATION NO. 2-1B-38

DATE 21 6 1951 LAT. 25° 17' N. LONG. 93° 58' W.
Day Month Year 12°
TIME 0913 DEPTH 1910 MAX. SAMPLE DEPTH 2301 WIRE ANGLE 10 °
GCT Faths. Meters
WATER COLOR - WEATHER 04 SEA 2 SWELL 135 ° T. 8 ft.
Code Code Code Direction Hgt.
4 sec. CLOUDS -- -- TEMP. 81.7 °F. 76.6 °F.
Period Type Amount Dry Wet
BAR. 29.90 in. REL. HUM. 80 % WIND 135 ° T. - VIS. 6
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	28.09	36.98	0.0	0.4	1.2	0.4
15	28.09	36.96				
35	23.89	36.78				
74	22.80	36.83				
108	21.91	36.67				
147	20.31	36.76				
220	14.98	36.13				
292	12.83	35.77				
435	10.59	35.43				
587	8.81	35.16				
729	7.33	35.01				
880	5.48	35.03	1.7	60.2	1.4	0.2
1165	4.52	35.12				
1438	4.27	35.03				
1446	4.25	35.21				
1723	4.19	35.05	1.6	71.5	6.8	0.0
1725	4.20	35.05				
2012	---	35.01	1.6	65.4	0.0	0.0
2301	4.19	35.07	1.4	62.5	1.1	0.5

STATION NO. 2-1B-38

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	28.09	36.98	23.88
10	28.09	36.97	23.87
20	27.92	36.89	23.86
30	25.90	36.78	24.43
50	23.37	36.79	25.20
75	22.70	36.83	25.43
100	22.22	36.68	25.45
150	19.50	36.76	26.25
200	15.75	36.29	26.81
250	13.80	35.98	27.00
300	12.78	35.76	27.04
400	11.10	35.50	27.16
500	9.70	35.30	27.26
600	8.67	35.13	27.29
700	7.62	35.02	27.37
800	6.46	35.01	27.52
1000	4.89	35.09	27.78
1200	4.49	35.12	27.85
1500	4.23	35.10	27.86
2000	4.20	35.05	27.83

STATION NO. 2-1B-39

DATE 21 6 1951 LAT. 24° 40' N. LONG. 94° 06' W.
Day Month Year

TIME 2359 DEPTH 1975 MAX. SAMPLE DEPTH 119 WIRE ANGLE 37 °
GCT Faths. Meters

WATER COLOR - WEATHER 04 SEA 3 SWELL 135 ° T. 5 ft.
Code Code Code Direction Hgt.

4 sec. CLOUDS -- -- TEMP. 82.9 °F. 79.6 °F.
Period Type Amount Dry Wet

BAR. 29.85 in. REL. HUM. 88 % WIND 135 ° T. - VIS. 7
Direction Force Code

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	28.40	37.01	0	28.40	37.01	23.80
11	28.15	36.94	10	28.24	36.94	23.80
27	27.12	36.96	20	28.00	36.96	23.89
59	23.12	36.80	30	24.60	36.95	24.96
87	22.68	36.76	50	23.40	36.83	25.22
119	22.07	36.73	75	22.85	36.77	25.34
			100	22.41	36.75	25.45
			150	(21.30)	(36.70)	25.72

() Extrapolated values.

STATION NO. 2-1B-40

DATE 22 6 1951 LAT. 24° 01' N. LONG. 94° 00' W.
Day Month Year

TIME 0805 DEPTH 1960 MAX. SAMPLE DEPTH 1296 WIRE ANGLE 45 °
GCT Faths. Meters

WATER COLOR - WEATHER 01 SEA 3 SWELL 135 ° T. 8 ft.
Code Code Code Direction Hgt.

4 sec. CLOUDS Cu 3 TEMP. 81.6 °F. 76.8 °F.
Period Type Amount Dry Wet

BAR. 29.84 in. REL. HUM. 80 % WIND 135 ° T. - VIS. 7
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	28.18	36.87	0.0	0.4	2.4	0.4
9	28.23	36.80				
23	27.10	36.83				
49	23.48	36.76				
72	22.71	36.76				
98	21.40	36.71				
146	18.12	36.53				
191	15.74	36.29	0.8	54.2	0.0	0.0
263	---	36.38				
327	10.32	35.44				
387	12.68	35.79				
450	10.78	35.53				
573	7.99	35.08				
694	6.49	34.96				
821	5.42	34.97	1.9	75.6	0.7	0.2
1296	4.34	35.01	1.4	61.9	0.4	0.2

STATION NO. 2-1B-40

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	28.18	36.87	23.76
10	28.21	36.80	23.70
20	27.30	36.82	24.01
30	25.80	36.81	24.48
50	23.38	36.76	25.18
75	22.68	36.76	25.38
100	21.30	36.69	25.72
150	17.84	36.51	26.49
200	15.60	36.27	26.83
250	14.77	36.13	26.91
300	14.08	36.01	26.97
400	12.45	35.75	27.10
500	9.55	35.34	27.31
600	7.65	35.03	27.37
700	6.39	34.96	27.49
800	5.60	34.96	27.59
1000	4.79	35.00	27.72
1200	4.33	35.01	27.78

STATION NO. 2-1B-41

DATE 22 (Day) 6 (Month) 1951 (Year) LAT. 23° 22' N. LONG. 94° 00' W.

TIME 1957 (GCT) DEPTH 1990 (Faths.) MAX. SAMPLE DEPTH 2129 (Meters) WIRE ANGLE 19 °

WATER COLOR - (Code) WEATHER 01 (Code) SEA 2 (Code) SWELL 135 (Direction) ° T. 4 (Hgt.) ft.

4 (Period) sec. CLOUDS Cu (Type) 1 (Amount) TEMP. 85.8 (Dry) °F. 78.6 (Wet) °F.

BAR. 29.86 in. REL. HUM. 72 % WIND 135 (Direction) ° T. - (Force) VIS. 9 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
Cast I						
0	28.32	36.92	0.0	0.5	0.0	0.0
14	28.12	36.91	0.0	0.6	0.2	0.8
33	26.45	36.67	0.0	0.4	1.4	0.4
71	22.98	36.80	0.0	0.2	1.6	0.2
105	21.93	36.78				
144	20.05	36.67	0.2	6.6	1.8	0.4
217	15.66	36.26	1.0	67.8	2.2	0.4
Cast II						
71	23.11	36.82	0.0	0.1	0.0	0.4
209	15.94	36.26	0.9	40.3	1.2	0.0
353	11.60	35.57				
488	9.07	35.23	1.6	78.6	1.4	0.2
633	7.16	34.99	2.0	91.5	2.2[a]	0.5
911	5.41	35.01	1.6	72.3	2.7	0.0
1190	4.48	35.07	1.7	62.9	0.0	0.0
1467	4.25	35.03	1.5	58.8	0.9	0.3
2129	4.22	35.07	1.4	50.5	0.8	2.8

(a) Green carbohydrates.

STATION NO. 2-1B-41

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	28.32	36.92	23.75
10	28.20	36.91	23.79
20	28.00	36.86	23.81
30	27.20	36.68	23.94
50	24.68	36.69	24.74
75	22.90	36.80	25.35
100	22.13	36.78	25.55
150	19.75	36.65	26.10
200	16.70	36.35	26.64
250	14.57	36.12	26.95
300	13.00	35.82	27.05
400	10.60	35.46	27.22
500	8.95	35.20	27.30
600	7.58	35.02	27.37
700	6.69	34.99	27.47
800	6.01	35.00	27.57
1000	5.00	35.03	27.72
1200	4.48	35.07	27.81
1500	4.28	35.07	27.83
2000	4.20	35.07	27.84

STATION NO. 2-1B-42

DATE 23 6 1951 LAT. 22° 40' N. LONG. 94° 00' W.
Day Month Year

TIME 0310 DEPTH 2000 MAX. SAMPLE DEPTH 1481 WIRE ANGLE 35 °
GCT Faths. 07 Meters

WATER COLOR - WEATHER 14 SEA 3-4 SWELL 180 ° T. 9 ft.
Code Code Code Direction Hgt.

4-5 sec. CLOUDS -- -- TEMP. 82.0 °F. 77.5 °F.
Period Type Amount Dry Wet

BAR. 29.81 in. REL. HUM. 82 % WIND 090 ° T. - VIS. 6
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	28.00	36.69	0.0	0.3	0.7	0.0
12	28.00	36.71				
28	27.23	36.83				
61	23.31	36.76				
90	22.88	36.76				
121	21.29	36.71				
178	18.14	36.58				
233	15.43	36.17	1.0	61.8	0.7	0.0
330	12.19	35.70				
420	10.15	35.39				
497	8.94	35.23				
578	7.46	35.01				
734	6.15	34.94	2.0	79.1	0.0	0.0
888	5.38	34.97				
1042	4.81	34.87				
1481	4.22	34.94	1.6	55.4	1.0	0.0

STATION NO. 2-1B-42

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	28.00	36.69	23.69
10	28.00	36.70	23.69
20	27.85	36.76	23.79
30	27.10	36.82	24.08
50	23.71	36.79	25.10
75	23.20	36.76	25.23
100	22.35	36.75	25.47
150	19.75	36.65	26.10
200	16.70	36.41	26.68
250	14.82	36.08	26.86
300	12.92	35.84	27.08
400	10.60	35.45	27.22
500	8.88	35.22	27.33
600	7.27	34.99	27.39
700	6.35	34.94	27.48
800	5.78	34.95	27.56
1000	4.93	34.89	27.62
1200	4.50	34.87	27.65
1500	(4.20)	(34.95)	27.75

() Extrapolated values.

STATION NO. 2-1B-45

DATE 24 6 1951 LAT. 20° 34' N. LONG. 94° 11' W.
Day Month Year

TIME 1805 DEPTH 1100 MAX. SAMPLE DEPTH 1613 WIRE ANGLE 25 °
GCT Faths. 03 Meters

WATER COLOR - WEATHER 60 SEA 2 SWELL 180 ° T. 6 ft.
Code Code Code Direction Hgt.

5 sec. CLOUDS - -- TEMP. 81.2 °F. 78.2 °F.
Period Type Amount Dry Wet

BAR. 29.84 in. REL. HUM. 88 % WIND 180 ° T. - VIS. 6
Direction Force Code

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	28.47	36.62	0	28.47	36.62	23.48
13	28.47	36.64	10	28.47	36.63	23.49
31	25.09	36.62	20	28.38	36.64	23.52
67	21.63	36.62	30	26.00	36.62	24.28
99	---	36.55	50	23.08	36.62	25.16
135	16.44	36.31	75	20.50	36.61	25.87
202	13.58	35.91	100	18.75	36.55	26.29
268	11.68	35.68	150	15.80	36.24	26.76
393	9.23	35.17	200	13.80	35.93	26.97
525	7.47	35.03	250	12.50	35.75	27.09
650	6.35	34.94	300	11.31	35.56	27.17
785	5.56	34.99	400	9.19	35.16	27.23
1051	4.59	35.05	500	7.79	35.05	27.36
1325	4.27	35.10	600	6.74	34.96	27.44
1613	4.16	34.99	700	6.03	34.95	27.53
			800	5.45	34.99	27.63
			1000	4.73	35.04	27.76
			1200	4.38	35.03	27.79
			1500	4.21	34.99	27.78

STATION NO. 2-1B-46

DATE 24 6 1951 LAT. 20° 04' N. LONG. 93° 57' W.
Day Month Year

TIME 0030 DEPTH 575 MAX. SAMPLE DEPTH 930 WIRE ANGLE 0 °
GCT Faths. Meters

WATER COLOR - WEATHER 01 SEA 1 SWELL 090 ° T. 6 ft.
Code Code Code Direction Hgt.

4 sec. CLOUDS Cu As 1,7 TEMP. 82.5 °F. 78.6 °F.
Period Type Amount Dry Wet

BAR. 29.82 in. REL. HUM. 84 % WIND 090 ° T. - VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	28.65	36.53	0.0	0.6	0.4	0.0
10	28.56	36.56				
25	25.74	36.76				
50	22.41	36.62				
75	20.29	36.62				
100	18.64	36.51	0.5	9.0	0.0	0.4
155	15.46	36.06				
206	13.48	35.82				
307	10.51	35.34	1.7	58.0	0.7	0.3
413	8.57	35.07				
514	7.45	34.97				
621	6.72	34.97				
724	6.26	34.96				
830	5.44	34.96				
930	5.10	35.01	1.8	51.3	2.4	0.3

STATION NO. 2-1B-46

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	28.65	36.53	23.35
10	28.56	36.56	23.40
20	26.90	36.73	24.07
30	25.10	36.74	24.65
50	22.41	36.70	25.41
75	20.29	36.62	25.94
100	18.64	36.51	26.28
150	15.78	36.10	26.66
200	13.78	35.85	26.91
250	12.21	35.60	27.03
300	10.75	35.37	27.13
400	8.69	35.10	27.27
500	7.59	34.98	27.34
600	6.90	34.97	27.43
700	6.39	34.96	27.49
800	5.58	34.96	27.60
1000	(5.02)	(35.01)	27.70

Extrapolated values.

STATION NO. 2-1B-47

DATE 25 6 1951 LAT. 19° 17' N. LONG. 94° 03' W.
Day Month Year

TIME 0830 DEPTH 480 MAX. SAMPLE DEPTH 673 WIRE ANGLE 20 °
GCT Faths. Meters

WATER COLOR - WEATHER 01 SEA 1 SWELL 090 ° T. 4 ft.
Code Code Code Direction Hgt.

5 sec. CLOUDS Cu 7 TEMP. 80.5 °F. 79.0 °F.
Period Type Amount Dry Wet

BAR. 29.81 in. REL. HUM. 94 % WIND 090 ° T. - VIS. 7
Direction Force Code

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	28.43	36.69	0	28.43	36.69	23.54
9	28.43	36.71	10	28.43	36.71	23.56
23	25.27	36.74	20	26.05	36.74	24.35
47	22.77	36.74	30	24.75	36.74	24.75
70	21.18	36.65	50	22.60	36.73	25.38
93	19.62	36.58	75	20.79	36.63	25.81
144	16.18	36.27	100	19.09	36.55	26.20
191	14.52	35.99	150	16.00	36.24	26.72
236	12.90	35.71	200	14.12	35.95	26.91
282	11.56	35.64	250	12.42	35.68	27.05
332	10.61	35.44	300	11.22	35.58	27.21
379	9.61	35.25	400	9.29	35.19	27.24
473	8.32	35.03	500	8.08	35.03	27.31
575	7.26	35.12	600	7.03	35.11	27.52
673	6.51	34.97				

STATION NO. 2-1B-48

DATE 25 (Day) 6 (Month) 1951 (Year) LAT. 18° 40' N. LONG. 94° 00' W.
TIME 1410 (GCT) DEPTH 95 (Faths.) MAX. SAMPLE DEPTH 153 (Meters) WIRE ANGLE 0 °
WATER COLOR -- (Code) WEATHER 01 (Code) SEA 2 (Code) SWELL 135 (Direction) ° T. 6 (Hgt.) ft.
4 (Period) sec. CLOUDS Ac Cu (Type) 3.1 (Amount) TEMP. 81.0 (Dry) °F. 77.5 (Wet) °F.
BAR. 29.84 in. REL. HUM. 86 % WIND 135 (Direction) ° T. - (Force) VIS. 9 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	28.08	36.62	0.0	0.2	0.0	0.7
10	28.00	36.60				
25	23.60	36.60				
50	21.79	36.56				
75	20.04	36.62	0.3	5.7	0.9	0.5
99	18.69	36.47				
153	16.64	36.31	0.8	45.4	6.6	0.2

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	28.08	36.62	23.61
10	28.00	36.60	23.62
20	24.70	36.60	24.66
30	23.40	36.60	25.05
50	21.79	36.56	25.48
75	20.04	36.62	26.00
100	18.68	36.47	26.24
150	16.75	36.32	26.60

STATION NO. 2-1B-49

DATE 25 6 1951 LAT. 18° 18' N. LONG. 94° 00' W.
Day Month Year

TIME 1823 DEPTH 8.5 MAX. SAMPLE DEPTH 17 WIRE ANGLE 0 °
GCT Faths. Meters

WATER COLOR - WEATHER 01 SEA 1 SWELL 045 ° T. 2 ft.
Code Code Code Direction Hgt.

6 sec. CLOUDS Ac 1 TEMP. 87.8 °F. 79.8 °F.
Period Type Amount Dry Wet

BAR. 29.83 in. REL. HUM. 70 % WIND 090 ° T. - VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	28.12	36.60	0.0	---	0.3	1.6
17	---	36.73	0.0	0.2	1.6	0.2

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	28.12	36.60	23.58
10	26.70	36.67	24.09

STATION NO. 2-1B-50

DATE 26 6 1951 LAT. 18° 55' N. LONG. 91° 57' W.
Day Month Year

TIME 1443 DEPTH 9.5 MAX. SAMPLE DEPTH 10 WIRE ANGLE 0 °
GCT Faths. Meters

WATER COLOR - WEATHER 01 SEA 2 SWELL 090 ° T. 6 ft.
Code Code Code Direction Hgt.

4 sec. CLOUDS Cu 1 TEMP. 81.5 °F. 77.4 °F.
Period Type Amount Dry Wet

BAR. 29.80 in. REL. HUM. 84 % WIND 120 ° T. - VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.32	36.87	0.0	0.4	0.6	0.7
10	27.28	36.91	0.2	0.0	5.9	0.2

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	27.32	36.87	24.04
10	27.28	36.91	24.09

STATION NO. 2-1B-51

DATE 26 (Day) 6 (Month) 1951 (Year) LAT. 19° 20' N. LONG. 92° 00' W.

TIME 1845 (GCT) DEPTH 19 (Faths.) MAX. SAMPLE DEPTH 30 (Meters) WIRE ANGLE 0 °

WATER COLOR - (Code) WEATHER 01 (Code) SEA 2 (Code) SWELL 090 (Direction) ° T. 3 (Hgt.) ft.

3 (Period) sec. CLOUDS Ci (Type) 1 (Amount) TEMP. 82.8 (Dry) °F. 77.8 (Wet) °F.

BAR. 29.81 in. REL. HUM. 80% WIND 120 (Direction) ° T. - (Force) VIS. 9 (Code)

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	28.17	36.74	0	28.17	36.74	23.67
15	28.01	36.71	10	28.10	36.72	23.68
30	26.24	36.78	20	27.80	36.72	23.77
			30	26.24	36.78	24.32

STATION NO. 2-1B-52

DATE 27 (Day) 6 (Month) 1951 (Year) LAT. 20° 00' N. LONG. 92° 00' W.

TIME 0015 (GCT) DEPTH 38 (Faths.) MAX. SAMPLE DEPTH 65 (Meters) WIRE ANGLE 0 °

WATER COLOR - (Code) WEATHER 01 (Code) SEA 2 (Code) SWELL 045 ° (Direction) T. 6 ft. (Hgt.)

4 sec. (Period) CLOUDS Cu (Type) 1 (Amount) TEMP. 83.0 °F. (Dry) 77.1 °F. (Wet)

BAR. 29.75 in. REL. HUM. 76 % WIND 045 ° (Direction) T. - (Force) VIS. 9 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	28.03	36.76	0.0	0.2	0.0	0.0
10	27.92	36.74				
25	27.80	36.74	0.0	0.1	3.3	0.6
40	24.66	36.73				
65	19.46	36.53	0.6	9.1	1.0	0.9

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	28.03	36.76	23.73
10	27.92	36.74	23.75
20	27.90	36.74	23.76
30	27.63	36.73	23.84
50	22.38	36.64	25.37

STATION NO. 2-1B-53

DATE 27 6 1951 LAT. 20° 40' N. LONG. 91° 57' W.
Day Month Year

TIME 1725 DEPTH 15 MAX. SAMPLE DEPTH 24 WIRE ANGLE 0 °
GCT Faths. Meters

WATER COLOR - WEATHER 01 SEA 2 SWELL 090 ° T. 4 ft.
Code Code Code Direction Hgt.

4 sec. CLOUDS Cu 9 TEMP. 83.0 °F. 79.0 °F.
Period Type Amount Dry Wet

BAR. 29.85 in. REL. HUM. 84% WIND 090 ° T. - VIS. 9
Direction Force Code

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	27.78	36.87	0	27.78	36.87	23.89
12	27.68	36.76	10	27.69	36.77	23.85
24	27.67	36.74	20	27.68	36.74	23.83

STATION NO. 2-1B-54

DATE 28 6 1951 LAT. 21° 20' N. LONG. 91° 58' W.
Day Month Year

TIME 0002 DEPTH 29 MAX. SAMPLE DEPTH 45 WIRE ANGLE 0 °
GCT Faths. Meters

WATER COLOR - WEATHER 01 SEA 1 SWELL 090 ° T. 6 ft.
Code Code Code Direction Hgt.

4 sec. CLOUDS Cu 3 TEMP. 81.5 °F. 78.1 °F.
Period Type Amount Dry Wet

BAR. 29.81 in. REL. HUM. 86 % WIND 090 ° T. - VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.73	36.76	0.1	0.4	0.0	0.0
10	27.37	36.78				
25	27.18	36.80	0.0	0.3	0.7	---
45	25.09	36.67	0.0	0.0	1.0	0.2

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	27.73	36.76	23.83
10	27.37	36.78	23.96
20	27.23	36.79	24.01
30	27.00	36.78	24.08

STATION NO. 2-1B-55

DATE 28 (Day) 6 (Month) 1951 (Year) LAT. 22° 00' N. LONG. 91° 58' W.
TIME 0445 (GCT) DEPTH 38 (Faths.) MAX. SAMPLE DEPTH 69 (Meters) WIRE ANGLE 7 °
WATER COLOR - (Code) WEATHER 01 (Code) SEA 1 (Code) SWELL 090 ° (Direction) T. 4 ft. (Hgt.)
4 sec. (Period) CLOUDS Cu (Type) 3 (Amount) TEMP. 80.8 °F. (Dry) 77.8 °F. (Wet)
BAR. 29.86 in. REL. HUM. 87 % WIND 060 ° (Direction) T. - (Force) VIS. 8 (Code)

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	27.28	36.67	0	27.28	36.67	23.91
10	27.27	36.71	10	27.27	36.71	23.94
25	27.23	36.67	20	27.27	36.69	23.92
49	23.34	36.71	30	27.15	36.67	23.95
69	20.63	36.71	50	23.33	36.71	25.15

STATION NO. 2-1B-56

DATE 28 6 1951 LAT. 22° 40' N. LONG. 92° 00' W.
Day Month Year

TIME 1050 DEPTH 1950 MAX. SAMPLE DEPTH 1643 WIRE ANGLE 35 °
GCT Faths. Meters

WATER COLOR - WEATHER 01 SEA 2 SWELL 090 ° T. 8 ft.
Code Code Code Direction Hgt.

4 sec. CLOUDS Cu 6 TEMP. 80.4 °F. 77.4 °F.
Period Type Amount Dry Wet

BAR. 29.85 in. REL. HUM. 87 % WIND 090 ° T. - VIS. 8
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.63	36.69	0.0	0.4	2.5	1.1
12	27.67	36.67				
28	27.66	36.73				
61	23.29	36.78				
88	22.52	36.78				
119	21.00	36.73				
174	17.89	36.69				
224	15.96	36.36				
316	12.30	35.77				
416	9.69	35.34				
510	8.20	35.14				
610	7.13	34.99				
804	5.57	35.01	2.0	67.8	2.4	0.4
1000	4.92	35.05				
1195	4.44	35.01				
1643	4.20	35.05	1.5	53.3	0.5	0.0

STATION NO. 2-1B-56

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	27.63	36.69	23.81
10	27.66	36.68	23.79
20	27.67	36.69	23.79
30	27.58	36.73	23.85
50	24.20	36.77	24.94
75	22.70	36.78	25.39
100	21.75	36.77	25.65
150	19.20	36.66	26.26
200	17.00	36.46	26.65
250	14.75	36.15	26.93
300	12.75	35.85	27.12
400	10.03	35.39	27.27
500	8.40	35.16	27.36
600	7.24	35.00	27.41
700	6.38	34.99	27.52
800	5.60	35.01	27.63
1000	4.92	35.05	27.75
1200	4.41	35.01	27.77
1500	4.22	35.04	27.82

STATION NO. 2-1B-57

DATE 28 6 1951 LAT. 23° 19' N. LONG. 92° 00' W.
Day Month Year

TIME 1925 DEPTH 1990 MAX. SAMPLE DEPTH 195 WIRE ANGLE 30 °
GCT Faths. Meters

WATER COLOR - WEATHER 01 SEA 1 SWELL 090 ° T. 5 ft.
Code Code Code Direction Hgt.

4 sec. CLOUDS Cu 7 TEMP. 84.7 °F. 79.3 °F.
Period Type Amount Dry Wet

BAR. 29.90 in. REL. HUM. 79 % WIND 120 ° T. - VIS. 9
Direction Force Code

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	27.79	36.55	0	27.79	36.55	23.65
13	27.78	36.74	10	27.76	36.71	23.78
30	27.76	36.78	20	27.80	36.76	23.80
65	---	37.00	30	27.76	36.78	23.83
95	22.42	36.83	50	26.95	36.91	24.19
130	20.95	36.73	75	24.48	36.97	25.01
195	17.16	36.65	100	22.20	36.82	25.56
			150	19.69	36.71	26.17
			200	(17.00)	(36.64)	26.79

() Extrapolated values.

STATION NO. 2-1B-62

DATE 29 6 1951 LAT. 26° 46' N. LONG. 91° 55' W.
Day Month Year

TIME 1843 DEPTH 950 MAX. SAMPLE DEPTH 547 WIRE ANGLE 52°
GCT Faths. 04,60 Meters

WATER COLOR - WEATHER 14 SEA 4 SWELL 180 ° T. 8 ft.
Code Code Code Direction Hgt.

4 sec. CLOUDS Cb,Cu 4.6 TEMP. 84.5 °F. 79.0 °F.
Period Type Amount Dry Wet

BAR. 29.98 in. REL. HUM. 78 % WIND 180 ° T. - VIS. 6
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.91	36.58	0.0	0.6	2.3	0.1
6	27.94	36.47				
16	27.93	36.49				
32	26.67	36.56				
48	25.87	36.56				
66	24.15	36.58				
97	22.33	36.73				
127	---	36.73				
179	---	36.67				
208	---	36.49				
259	---	36.15				
300	13.39	35.91	1.2	45.5	0.2	0.0
383	10.90	35.48				
461	9.36	35.26				
547	7.51	35.05	1.9	81.6	2.2	0.3

STATION NO. 2-1B-62

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	27.91	36.58	23.63
10	27.95	36.48	23.55
20	27.85	36.50	23.59
30	27.00	36.55	23.91
50	25.55	36.56	24.37
75	23.70	36.62	24.98
100	22.10	36.73	25.52
150	19.95	36.71	26.10
200	17.35	36.58	26.66
250	15.25	36.19	26.85
300	13.39	35.91	27.04
400	10.60	35.45	27.22
500	8.50	35.18	27.36

STATION NO. 2-1B-63

DATE 30 6 1951 LAT. 27° 20' N. LONG. 91° 52' W.
Day Month Year
TIME 0046 DEPTH 600 MAX. SAMPLE DEPTH 923 WIRE ANGLE 12°
GCT Faths. Meters
WATER COLOR - WEATHER 03 SEA 2 SWELL 180 ° T. 8 ft.
Code Code Code Direction Hgt.
5 sec. CLOUDS -- -- TEMP. 83.6 °F. 76.6 °F.
Period Type Amount Dry Wet
BAR. 29.91 in. REL. HUM. 72 % WIND 180 ° T. - VIS.6
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.91	36.89	0.0	0.6	0.2	0.4
10	28.00	37.01				
24	27.99	37.03				
49	24.49	36.58				
73	22.27	36.89				
98	21.96	36.73				
153	18.06	36.56				
203	15.56	36.31				
303	12.35	35.61				
408	9.78	35.32	1.8	63.8	1.0	0.0
508	8.07	35.19				
614	7.01	35.01				
715	6.34	35.08				
822	5.20	35.05				
923	4.82	35.16	---	69.0	---	0.0

STATION NO. 2-1B-63

VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	σ_t
0	27.91	36.89	23.87
10	28.00	37.01	23.93
20	27.99	37.02	23.94
30	27.83	37.02	23.99
50	24.20	36.99	25.11
75	22.24	36.91	25.62
100	21.70	36.72	25.63
150	18.16	36.58	26.46
200	15.77	36.36	26.86
250	14.23	35.96	26.90
300	12.55	35.62	26.98
400	9.95	35.33	27.24
500	8.17	35.20	27.43
600	7.15	35.03	27.44
700	6.45	35.07	27.57
800	5.45	35.05	27.68
1000	(4.72)	(35.19)	27.88

() Extrapolated values.

STATION NO. 2-1B-64

DATE 30 6 1951 LAT. 28° 00' N. LONG. 92° 00' W.
Day Month Year

TIME 0615 DEPTH 50 MAX. SAMPLE DEPTH 75 WIRE ANGLE 0 °
GCT Faths. Meters

WATER COLOR - WEATHER 01 SEA 2 SWELL 180 ° T. 8 ft.
Code Code Code Direction Hgt.

4 sec. CLOUDS -- -- TEMP. 82.4 °F. 78.0 °F.
Period Type Amount Dry Wet

BAR. 29.93 in. REL. HUM. 84 % WIND 180 ° T. - VIS. 8
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.97	36.18	0.0	0.0	0.4	0.4
10	28.13	36.45				
25	28.10	36.78	0.0	0.3	1.2	0.3
50	24.45	36.64				
75	20.31	36.51	0.2	2.9	0.4	0.6

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	27.97	36.18	23.31
10	28.13	36.45	23.46
20	28.12	36.74	23.68
30	28.00	36.72	23.71
50	24.45	36.64	24.77
75	20.31	36.51	25.85

STATION NO. 2-1B-65

DATE 30 6 1951 LAT. 28° 40' N. LONG. 91° 58' W.
Day Month Year

TIME 1100 DEPTH 21 MAX. SAMPLE DEPTH 30 WIRE ANGLE 0 °
GCT Fathoms. Meters

WATER COLOR - WEATHER 01 SEA 2 SWELL 180 ° T. 3 ft.
Code Code Code Direction Hgt.

5 sec. CLOUDS Cu 9 TEMP. 82.0 °F. 78.5 °F.
Period Type Amount Dry Wet

BAR. 29.87 in. REL. HUM. 86 % WIND 180 ° T. - VIS. 8
Direction Force Code

OBSERVED VALUES			VALUES AT STANDARD DEPTHS			
Depth	Temp. °C	Sal. ‰	Depth	Temp. °C	Sal. ‰	σ_t
0	28.32	31.60	0	28.32	31.60	19.76
15	28.29	32.30	10	28.30	32.02	20.08
30	21.94	36.27	20	27.90	32.75	20.76
			30	21.94	36.27	25.22

STATION NO. 2-1B-66

DATE 30 6 1951 LAT. 28° 52' N. LONG. 93° 00' W.
Day Month Year
TIME 1754 DEPTH 12 MAX. SAMPLE DEPTH 15 WIRE ANGLE 0 °
GCT Faths. Meters
WATER COLOR - WEATHER 01 SEA 2 SWELL 180 ° T. 6 ft.
Code Code Code Direction Hgt.
4 sec. CLOUDS Cu 5 TEMP. 87.0 °F. 81.0 °F.
Period Type Amount Dry Wet
BAR. 29.93 in. REL. HUM. 77 % WIND 180 ° T. - VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	28.60	31.40	0.1	0.0	2.2	0.2
15	28.53	31.46	0.0	0.4	0.7	---

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	28.60	31.40	19.52
10	28.55	31.44	19.57

Figure 17.--Locations of stations occupied on Cruise 3-1C.

STATION NO. 3-1C-1

DATE 10 8 1951 (Day Month Year) LAT. 28° 53' N. LONG. 89° 00' W.

TIME 0845 (GCT) DEPTH 98 (Faths.) MAX. SAMPLE DEPTH 163 (Meters) WIRE ANGLE 3 °

WATER COLOR -- (Code) WEATHER 00 (Code) SEA 1 (Code) SWELL 090 (Direction) ° T. 2 (Hgt.) ft.

4 (Period) sec. CLOUDS -- (Type) -- (Amount) TEMP. 88.8 (Dry) °F. 84.7 (Wet) °F.

BAR. 29.95 in. REL. HUM. 85 % WIND 090 (Direction) ° T. 2 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	30.1	25.44	---	11.2	0.7	0.0
20	25.82	35.57				
54	23.53	36.24				
89	15.42	36.15	0.5	14.5	0.0	0.1
163	21.34	36.38	0.5	17.5	0.4	0.1

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	30.10	25.44	14.58
10	27.71	34.15	21.87
20	25.82	35.57	23.54
30	25.15	35.78	23.91
50	23.92	36.21	24.60
75	19.30	36.18	25.86

STATION NO. 3-1C-2

DATE 10 8 1951 LAT. 29° 33' N. LONG. 88° 23' W.
Day Month Year

TIME 1535 DEPTH 20 MAX. SAMPLE DEPTH 30 WIRE ANGLE 0 °
GCT Faths. Meters

WATER COLOR 0 WEATHER 01 SEA 2 SWELL 315 ° T. 3 ft.
Code Code Code Direction Hgt.

3 sec. CLOUDS Cu 1 TEMP. 86.1 °F. 80.0 °F.
Period Type Amount Dry Wet

BAR. 30.04 in. REL. HUM. 77 % WIND 315 ° T. 3 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	28.85	33.22	0.0	0.0	0.2	0.0
10	19.22	36.33	0.4	6.6	0.3	0.0
20	16.98	36.47	0.7	10.0	0.1	0.0
30	16.78	36.31	0.7	8.7	2.2	0.0

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	28.85	33.22	20.80
10	19.22	36.33	26.00
20	16.98	36.47	26.66
30	16.78	36.31	26.56

STATION NO. 3-1C-3

DATE 12 8 1951 LAT. 29° 00' N. LONG. 88° 01' W.
Day Month Year

TIME 0321 DEPTH 750 MAX. SAMPLE DEPTH 1262 WIRE ANGLE 23 °
GCT Faths. Meters

WATER COLOR - WEATHER 01 SEA 0 SWELL 265 ° T. 1 ft.
Code Code Code Direction Hgt.

4 sec. CLOUDS Ac 1 TEMP. 88.4 °F. 79.9 °F.
Period Type Amount Dry Wet

BAR. 29.99 in. REL. HUM. 69 % WIND 265 ° T. 1 VIS. 8
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	31.30	26.22	---	0.1	0.8	0.0
9	29.60	35.23				
23	29.00	36.60				
50	23.61	36.58				
73	21.46	36.55				
101	19.95	36.49				
153	16.94	36.38				
205	14.69	36.00	0.7	13.8	0.2	0.2
310	11.36	35.44				
421	9.02	35.07				
528	7.58	34.96	1.9	24.2	0.2	0.0
625	6.54	34.88				
846	5.33	34.90				
1058	4.59	34.94				
1262	4.36	34.94	1.6	22.1	0.0	0.0

STATION NO. 3-1C-3

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	31.30	26.22	14.75
10	29.59	35.23	22.06
20	29.00	35.85	22.72
30	27.40	36.59	23.81
50	23.61	36.58	24.97
75	21.38	36.55	25.59
100	20.01	36.49	25.91
150	17.07	36.38	26.57
200	14.85	36.04	26.82
250	13.15	35.69	26.91
300	11.64	35.47	27.04
400	9.46	35.13	27.16
500	7.96	34.98	27.28
600	6.80	34.90	27.39
700	6.12	34.88	27.46
800	5.53	34.89	27.55
1000	4.71	34.93	27.67
1200	4.37	34.94	27.72

STATION NO. 3-1C-4

DATE 12 8 1951 LAT. 28° 41' N. LONG. 87° 30' W.
Day Month Year

TIME 1246 DEPTH 920 MAX. SAMPLE DEPTH 1388 WIRE ANGLE 32°
GCT Faths. Meters

WATER COLOR - WEATHER 01 SEA 0 SWELL 330 ° T. 1 ft.
Code Code Code Direction Hgt.

4 sec. CLOUDS Cu 4 TEMP. 85.9 °F. 81.8 °F.
Period Type Amount Dry Wet

BAR. 30.01 in. REL. HUM. 84 % WIND 000 ° T. 1 VIS. 8
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	29.81	35.23	0.0	0.0	0.1	0.0
12	28.85	35.93				
29	27.62	36.08				
63	23.77	36.27				
93	20.87	36.51				
126	19.96	36.78				
188	16.16	36.18				
247	13.84	35.79				
362	10.86	35.30				
488	8.74	35.03				
608	7.32	34.94				
761	6.22	34.92				
917	5.26	34.99				
1099	4.70	35.03				
1388	4.30	35.08	0.9	19.0	1.4	0.0

STATION NO. 3-1C-4

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	29.81	35.23	21.98
10	29.05	35.73	22.62
20	28.38	36.00	23.04
30	27.60	36.08	23.36
50	25.22	36.20	24.20
75	22.50	36.40	25.16
100	20.64	36.56	25.80
150	18.35	36.50	26.35
200	15.65	36.07	26.67
250	13.74	35.75	26.84
300	12.30	35.49	26.93
400	10.08	35.20	27.11
500	8.53	35.02	27.23
600	7.39	34.94	27.34
700	6.61	34.92	27.43
800	5.96	34.93	27.52
1000	4.92	35.01	27.71
1200	4.50	35.05	27.79

STATION NO. 3-1C-5

DATE 12 8 1951 LAT. 28° 00' N. LONG. 87° 12' W.
Day Month Year

TIME 2127 DEPTH 1480 MAX. SAMPLE DEPTH 2488 WIRE ANGLE 17°
GCT Faths. Meters

WATER COLOR - WEATHER 01 SEA 1 SWELL --- ° T. 2 ft.
Code Code Code Direction Hgt.

4 sec. CLOUDS Ci 1 TEMP. 87.0 °F. 80.6 °F.
Period Type Amount Dry Wet

BAR. 30.04 in. REL. HUM. 76% WIND 090 ° T. 2 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	31.54	26.74	0.0	0.1	0.8	0.0
14	28.89	35.59				
33	27.26	36.08				
71	22.83	36.29				
105	21.50	36.38				
143	20.21	36.64				
214	16.16	36.29	0.4	7.6	0.8	0.3
285	13.36	35.73				
419	10.14	35.21				
563	7.75	34.94				
698	6.21	34.83				
843	5.49	35.75				
1125	4.64	34.92	1.9	25.4	0.0	0.0
1412	4.28	34.97				
1703	4.22	34.96				
2488	4.18	---	3.5	21.8	4.0	0.0

STATION NO. 3-1C-5

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	31.54	26.74	15.05
10	29.80	34.49	21.43
20	28.40	35.71	22.82
30	27.52	35.95	23.29
50	25.43	36.16	24.11
75	22.62	36.29	25.04
100	21.58	36.37	25.39
150	19.63	36.63	26.12
200	16.68	36.38	26.67
250	14.60	36.04	26.88
300	12.98	35.68	26.94
400	10.52	35.29	27.11
500	8.73	35.05	27.22
600	7.26	34.90	27.32
700	6.20	34.84	27.42
800	5.62	34.84	27.50
1000	4.98	34.88	27.60
1200	4.53	34.94	27.70
1500	4.24	34.97	27.76

STATION NO. 3-1C-6

DATE 13 8 1951 LAT. 27° 27' N. LONG. 86° 33' W.
Day Month Year
TIME 0947 DEPTH 1650 MAX. SAMPLE DEPTH 3028 WIRE ANGLE 3 °
GCT Faths. Meters
WATER COLOR - WEATHER 01 SEA 1 SWELL 090 ° T. 1 ft.
Code Code Code Direction Hgt.
6 sec. CLOUDS - -- TEMP. 85.8 °F. 79.4 °F.
Period Type Amount Dry Wet
BAR. 29.99 in. REL. HUM. 75 % WIND 090 ° T. 2 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	30.02	35.88	0.6	0.6	0.2	0.2
15	29.07	35.99				
35	27.04	36.11				
75	22.14	36.56				
110	19.94	36.58				
150	17.26	36.38				
225	14.00	35.88				
302	11.79	35.46				
451	9.11	35.08				
611	7.03	34.90				
761	5.58	34.88				
921	4.99	34.96				
1338	4.26	35.01	1.1	21.8	0.0	0.6
1762	4.19	35.05				
2201	4.20	35.03				
3028	4.25	35.03	1.5	21.8	0.0	0.8

STATION NO. 3-1C-6

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	30.02	35.88	22.40
10	29.12	35.95	22.76
20	28.25	36.02	23.10
30	27.42	36.08	23.42
50	25.35	36.26	24.21
75	22.14	36.56	25.38
100	20.43	36.57	25.86
150	17.26	36.38	26.53
200	14.99	36.03	26.79
250	13.17	35.72	26.93
300	11.83	35.48	27.01
400	10.02	35.19	27.12
500	8.40	35.01	27.24
600	7.20	34.91	27.34
700	6.12	34.89	27.47
800	5.37	34.90	27.57
1000	4.81	34.97	27.69
1200	4.46	35.00	27.76
1500	4.19	35.03	27.81
2000	4.19	35.04	27.82

STATION NO. 3-1C-7

DATE 13 8 1951 LAT. 26° 59' N. LONG. 86° 01' W.
Day Month Year
TIME 2347 DEPTH 1650 MAX. SAMPLE DEPTH 2038 WIRE ANGLE 13 °
GCT Faths. Meters
WATER COLOR - WEATHER 02 SEA 1 SWELL 045 ° T. 2 ft.
Code Code Code Direction Hgt.
4 sec. CLOUDS Cu Ci 01,10 TEMP. 86.6 °F. 80.1 °F.
Period Type Amount Dry Wet
BAR. 30.03 in. REL. HUM. 75 % WIND 045 ° T. 2 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	31.09	32.39	0.0	0.0	0.0	0.4
14	30.73	34.63	0.5	0.0	10.9	0.0
34	28.50	36.65	0.0	0.0	0.0	0.2
73	22.27	36.47	---	0.2	0.0	0.0
107	20.45	36.51	0.2	0.3	0.4	0.6
146	19.21	36.67	0.2	6.2	0.6	0.0
216	15.55	36.26	0.6	11.8	0.0	0.0
285	13.32	35.77	0.7	20.6	2.5	0.3
502	8.50	35.05	1.2	31.5	1.4	0.0
552	7.76	34.94	2.1	31.8	0.9	0.0
681	6.38	34.96	1.1	27.6	0.4	0.2
912	5.01	34.96	1.8	26.1	2.6	0.0
1277	4.28	34.96	1.6	23.1	5.0	0.0
1652	4.19	34.99	1.5	9.4	5.2	0.4
2038	4.19	35.01	---	19.2	---	0.1

STATION NO. 3-1C-7

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	31.09	32.39	19.42
10	30.84	34.00	20.71
20	30.22	35.10	21.75
30	29.19	36.20	22.92
50	26.33	36.63	24.18
75	22.12	36.58	25.40
100	20.70	36.53	25.76
150	18.92	36.43	26.15
200	16.28	36.30	26.70
250	14.46	36.04	26.91
300	12.97	35.69	26.95
400	10.42	35.32	27.15
500	8.56	35.06	27.25
600	7.21	34.95	27.37
700	6.27	34.96	27.51
800	5.57	34.96	27.60
1000	4.77	34.96	27.69
1200	4.37	34.96	27.74
1500	4.21	34.97	27.76
2000	4.19	35.01	27.80

STATION NO. 3-10-8

DATE 14 8 1951 LAT. 26° 29' N. LONG. 85° 29' W.
Day Month Year

TIME 1210 DEPTH 1730 MAX. SAMPLE DEPTH 2689 WIRE ANGLE 27°
GCT Faths. Meters

WATER COLOR - WEATHER 01 SEA 1 SWELL 120 ° T. 2 ft.
Code Code Code Direction Hgt.

5 sec. CLOUDS Sc Cu 1,6 TEMP. 86.0 °F. 79.0 °F.
Period Type Amount Dry Wet

BAR. 29.96 in. REL. HUM. 73 % WIND 090 ° T. 3 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	30.51	33.17	0.0	0.0	3.6	0.5
13	30.02	35.05	0.0	0.1	0.6	0.2
31	28.03	36.24	3.3	0.2	21.2	0.0
67	22.27	36.15	0.2	0.2	3.6	0.2
88	18.96	---	---	---	---	---
134	16.22	36.26	0.7	11.0	1.8	0.0
203	12.91	36.02	0.6	13.8	0.4	0.1
264	11.17	35.43	1.5	12.0	2.0	0.1
384	8.94	35.44	1.0	20.4	0.2	0.8
513	7.23	34.92	2.1	33.8	0.0	0.2
635	6.10	35.05	2.0	20.7	7.0	0.2
857	5.12	35.30	1.8	18.0	0.5	0.1
1210	4.36	35.01	0.9	15.5	0.4	0.2
1576	4.20	35.01	5.5	22.2	1.0	0.1
1960	4.20	35.08	1.1	19.8	1.3	0.2
2689	4.22	---	1.6	14.5	2.2	0.0

STATION NO. 3-1C-8

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	30.51	33.17	20.20
10	30.14	34.80	21.55
20	29.28	35.80	22.59
30	28.08	36.22	23.31
50	24.88	36.25	24.34
75	21.08	36.26	25.45
100	18.25	36.26	26.19
150	15.08	36.23	26.92
200	13.08	36.04	27.20
250	11.55	35.60	27.16
300	10.40	35.36	27.18
400	8.69	35.15	27.30
500	7.39	34.95	27.35
600	6.42	34.92	27.46
700	5.70	34.93	27.56
800	5.23	34.94	27.62
1000	4.72	34.97	27.71
1200	4.38	35.00	27.77
1500	4.20	35.01	27.79
2000	4.20	35.09	27.86

STATION NO. 3-1C-9

DATE 14 8 1951 LAT. 26° 00' N. LONG. 85° 00' W.
Day Month Year
TIME 2054 DEPTH 1000 MAX. SAMPLE DEPTH 1325 WIRE ANGLE 29°
GCT Faths. Meters
WATER COLOR - WEATHER 01 SEA 2 SWELL 090 ° T. 3 ft.
Code Code Code Direction Hgt.
4 sec. CLOUDS Sc Cu 10.4 TEMP. 88.7 °F. 80.7 °F.
Period Type Amount Dry Wet
BAR. 29.95 in. REL. HUM. 70 % WIND 090 ° T. 4 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	29.98	36.06	0.1	0.0	1.4	0.2
12	29.87	36.06				
30	28.35	36.04				
64	27.49	36.08				
94	24.59	---				
128	22.25	37.03				
192	18.72	36.18	0.3	0.7	6.8	0.0
253	16.43	36.35				
373	12.89	36.08				
415	---	37.05				
360	---	36.47				
300	14.38	36.18				
475	9.97	35.30				
710	6.56	34.90	2.2	38.0	2.3	0.4
928	5.36	34.96				
1325	4.23	34.99	1.2	20.5	2.6	0.4

** Change in depth while running cast.

STATION NO. 3-1C-9

OBSERVED VALUES			
Depth	Temp. °C	Sal. ‰	σ_t
0	29.98	36.06	22.55
10	29.92	36.06	22.57
20	28.82	36.05	22.93
30	28.35	36.04	23.08
50	27.96	36.06	23.23
75	26.32	36.15	23.82
100	24.00	36.56	24.84
150	20.90	36.97	26.04
200	18.50	36.61	26.40
250	16.53	36.36	26.69
300	15.00	36.24	26.94
400	12.26	(36.03)	27.36

Extrapolated values.

STATION NO. 3-1C-9A

DATE 15 8 1951 LAT. 26° 00' N. LONG. 85° 00' W.
Day Month Year
TIME 0308 DEPTH 1750 MAX. SAMPLE DEPTH 2029 WIRE ANGLE 40°
GCT Faths. 07 Meters
WATER COLOR - Code WEATHER 01 Code SEA 2 Code SWELL 090 Direction ° T. 3 Hgt. ft.
4 sec. Period CLOUDS Sc Cu Type 10.4 Amount TEMP. 88.7 °F. Dry 80.7 °F. Wet
BAR. 29.95 in. REL. HUM. 70 % WIND 090 Direction ° T. 4 Force VIS. 9 Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	29.91	36.06	0.1	0.1	0.8	0.0
11	29.90	36.04				
26	28.73	36.04				
56	27.07	36.08				
84	24.81	---				
116	22.91	36.96				
175	19.67	36.62	0.0	0.0	0.1	0.0
230	17.14	36.45				
342	13.52	36.36				
453	10.50	35.32				
556	8.29	36.09				
654	6.90	36.58				
856	5.44	34.96	1.9	31.7	2.4	0.0
1125	4.50	34.99				
1394	4.24	35.01				
2029	4.19	35.01	1.6	14.0	1.3	0.0

TATION NO. 3-1C-9A

VALUES AT STANDARD DEPTHS

epth	Temp. °C	Sal. ‰	σ_t
0	29.91	36.06	22.57
10	29.90	36.04	22.56
20	29.08	36.04	22.84
30	28.58	36.05	23.01
50	27.40	36.07	23.42
75	25.70	36.24	24.08
100	23.78	36.40	24.79
150	20.82	36.60	25.78
200	18.45	36.57	26.38
250	16.48	36.37	26.71
300	14.87	36.11	26.87
400	11.90	35.60	27.09
500	9.36	35.25	27.27
600	7.62	35.14	27.46
700	6.50	35.05	27.55
800	5.73	34.98	27.59
1000	4.86	34.97	27.69
1200	4.38	35.00	27.77
1500	4.22	35.01	27.79
2000	4.19	35.01	27.80

STATION NO. 3-1C-10

DATE 15 8 1951 LAT. 26° 06' N. LONG. 84° 19' W.
Day Month Year

TIME 1234 DEPTH 105 MAX. SAMPLE DEPTH 186 WIRE ANGLE 0 °
GCT Faths. Meters

WATER COLOR -- WEATHER 01 SEA 3 SWELL 135 ° T. - ft.
Code Code Code Direction Hgt.

- sec. CLOUDS Ci Cu 3,1 TEMP. 85.5 °F. 79.6 °F.
Period Type Amount Dry Wet

BAR. 29.98 in. REL. HUM. 77 % WIND 110 ° T. 3 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	29.83	35.73	0.1	0.0	0.2	0.1
10	29.83	35.71				
26	29.39	36.40				
52	25.11	36.47				
78	22.11	36.60				
104	19.91	36.55	0.2	4.6	0.0	0.4
145	17.38	36.44				
186	15.09	36.17	0.8	17.7	0.7	0.1

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	29.83	35.73	22.35
10	29.83	35.71	22.34
20	29.67	36.19	22.75
30	28.35	36.43	23.38
50	25.20	36.47	24.41
75	22.20	36.60	25.40
100	20.26	36.56	25.90
150	17.00	36.42	26.62

STATION NO. 3-1C-11

DATE 15 8 1951 LAT. 26° 09' N. LONG. 83° 50' W.
Day Month Year
TIME 1822 DEPTH 48 MAX. SAMPLE DEPTH 75 WIRE ANGLE 0 °
GCT Faths. Meters
WATER COLOR - WEATHER 02 SEA 2 SWELL 135 ° T. - ft.
Code Code Code Direction Hgt.
--- sec. CLOUDS Cu 9 TEMP. 82.1 °F. 76.9 °F.
Period Type Amount Dry Wet
BAR. 30.03 in. REL. HUM. 79 % WIND 135 ° T. 3-5 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	30.00	34.00	0.0	0.4	0.8	0.2
10	30.24	34.90				
25	26.85	36.13	0.0	0.0	1.3	0.0
50	22.13	36.45				
75	17.94	36.29	0.4	7.8	3.0	0.4

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	30.00	34.00	21.00
10	30.24	34.90	21.59
20	28.00	35.69	22.93
30	25.35	36.24	24.19
50	22.13	36.45	25.30
75	17.94	36.29	26.29

STATION NO. 3-1C-12

DATE 16 (Day) 8 (Month) 1951 (Year) LAT. 26° 31' N. LONG. 83° 10' W.
TIME 0119 (GCT) DEPTH 25 (Faths.) MAX. SAMPLE DEPTH 40 (Meters) WIRE ANGLE 0°
WATER COLOR - (Code) WEATHER 01 (Code) SEA 1 (Code) SWELL 135 (Direction) ° T. - (Hgt.) ft.
--- (Period) sec. CLOUDS Cu (Type) 8 (Amount) TEMP. 85.0 (Dry) °F. 78.0 (Wet) °F.
BAR. 30.02 in. REL. HUM. 73 % WIND 135 (Direction) ° T. 2 (Force) VIS. 7 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	30.26	34.81	0.0	0.1	1.9	0.0
20	28.82	36.11	0.1	0.0	1.1	0.0
40	23.45	36.40	0.1	0.1	0.0	0.0

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	30.26	34.81	21.51
10	29.65	35.44	22.20
20	28.82	36.11	22.98
30	26.00	36.31	24.04

STATION NO. 3-1C-13

DATE 16 8 1951 LAT. 26° 39' N. LONG. 82° 31' W.
Day Month Year
TIME 0732 DEPTH 9 MAX. SAMPLE DEPTH 14 WIRE ANGLE 0 °
GCT Faths. Meters
WATER COLOR - WEATHER 02 SEA 1 SWELL 180 ° T. 2 ft.
Code Code Code Direction Hgt.
4 sec. CLOUDS Cu As 1,7 TEMP. 83.7 °F. 78.3 °F.
Period Type Amount Dry Wet
BAR. 30.00 in. REL. HUM. 78% WIND 135 ° T. 3 VIS. 7
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	30.66	36.04	0.0	0.0	1.1	0.0
14	30.62	36.08	0.0	0.2	1.2	0.1

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	30.66	36.04	22.30
10	30.63	36.07	22.33

STATION NO. 3-1C-14

DATE 17 8 1951 LAT. 27° 17' N. LONG. 82° 58' W.
Day Month Year
TIME 1637 DEPTH 10 MAX. SAMPLE DEPTH 15 WIRE ANGLE 0 °
GCT Faths. Meters
WATER COLOR - WEATHER 01 SEA 1 SWELL 135 ° T. 1 ft.
Code Code Code Direction Hgt.
3 sec. CLOUDS Cu 1 TEMP. 88.7 °F. 79.2 °F.
Period Type Amount Dry Wet
BAR. 30.01 in. REL. HUM. 66 % WIND 135 °T. 2 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	30.79	35.53	0.0	0.6	1.9	0.4
15	30.64	35.97	0.1	0.4	0.4	0.1

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	30.79	35.53	21.87
10	30.66	35.82	22.13

STATION NO. 3-1C-15

DATE 17 8 1951 LAT. 27° 38' N. LONG. 83° 51' W.
Day Month Year

TIME 2336 DEPTH 24 MAX. SAMPLE DEPTH 40 WIRE ANGLE 0 °
GCT Faths. Meters

WATER COLOR - WEATHER 01 SEA 1 SWELL 180 ° T. 1 ft.
Code Code Code Direction Hgt.

4 sec. CLOUDS Cu 2 TEMP. 87.8 °F. 79.4 °F.
Period Type Amount Dry Wet

BAR. 29.98 in. REL. HUM. 69 % WIND 000 °T. 1 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	29.93	33.73	0.0	0.0	1.2	0.0
10	30.06	34.65				
25	25.68	36.31				
40	23.61	36.33	0.1	0.1	1.6	0.4

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	29.96	33.73	20.81
10	30.06	34.65	21.46
20	26.13	35.90	23.69
30	24.70	36.32	24.45

STATION NO. 3-1C-16

DATE 18 8 1951 LAT. 27° 42' N. LONG. 84° 51' W.
Day Month Year
TIME 0634 DEPTH 110 MAX. SAMPLE DEPTH 194 WIRE ANGLE 1.5°
GCT Faths. Meters
WATER COLOR - WEATHER 01 SEA 1 SWELL --- ° T. 1 ft.
Code Code Code Direction Hgt.
4 sec. CLOUDS Ac 2 TEMP. 85.8 °F. 77.6 °F.
Period Type Amount Dry Wet
BAR. 30.00 in. REL. HUM. 69 % WIND 135 ° T. 1 VIS. 8
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	30.27	30.46	0.0	0.2	2.0	0.2
15	26.81	36.15				
40	21.44	36.71				
65	19.34	36.65	0.4	10.5	1.6	0.5
90	18.04	36.58				
141	15.78	36.27				
194	14.50	36.04	0.7	19.5	1.3	0.2

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	30.27	30.46	18.26
10	28.00	34.26	21.86
20	24.90	36.31	24.38
30	22.50	36.52	25.25
50	20.38	36.69	25.97
75	18.70	36.62	26.35
100	17.50	36.54	26.59
150	15.51	36.22	26.82
200	(14.36)	(36.02)	26.92

() Extrapolated values.

STATION NO. 3-1C-17

DATE 18 (Day) 8 (Month) 1951 (Year) LAT. 28° 15' N. LONG. 84° 41' W.

TIME 1223 (GCT) DEPTH --- (Faths.) MAX. SAMPLE DEPTH 65 (Meters) WIRE ANGLE 0 °

WATER COLOR - (Code) WEATHER 01 (Code) SEA 1 (Code) SWELL 230 (Direction) ° T. 1 (Hgt.) ft.

4 (Period) sec. CLOUDS Cu (Type) 2 (Amount) TEMP. 85.3 (Dry) °F. 78.5 (Wet) °F.

BAR. 29.98 in. REL. HUM. 74 % WIND 135 (Direction) ° T. 1 (Force) VIS. 9 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	30.02	31.74	0.3	---	1.5	---
10	30.32	32.86				
25	25.24	36.00				
45	20.69	36.45				
65	15.70	36.15	0.7	11.2	0.5	0.1

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	30.02	31.74	19.30
10	30.32	32.86	20.04
20	26.50	34.96	22.87
30	23.93	36.12	24.53
50	19.25	36.37	26.02

STATION NO. 3-1C-18

DATE 18 8 1951 LAT. 29° 03' N. LONG. 84° 27' W.
Day Month Year
TIME 1940 DEPTH 15 MAX. SAMPLE DEPTH 24 WIRE ANGLE 0 °
GCT Faths. Meters
WATER COLOR - WEATHER 01 SEA 1 SWELL --- ° T. - ft.
Code Code Code Direction Hgt.
--- sec. CLOUDS Cu 1 TEMP. 91.8 °F. 80.9 °F.
Period Type Amount Dry Wet
BAR. 30 in. REL. HUM. 61 % WIND 215 ° T. 1 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	31.07	32.52	0.0	0.8	0.6	0.1
12	30.28	33.87				
24	26.84	35.66	0.0	0.1	1.2	---

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	31.07	32.52	19.52
10	30.36	33.65	20.61
20	28.26	35.07	22.38

STATION NO. 3-1C-20

DATE 19 8 1951 LAT. 29° 11' N. LONG. 85° 07' W.
Day Month Year

TIME 0052 DEPTH 15 MAX. SAMPLE DEPTH 25 WIRE ANGLE 0 °
GCT Faths. Meters

WATER COLOR - WEATHER 01 SEA 1 SWELL 020 ° T. 1 ft.
Code Code Code Direction Hgt.

4 sec. CLOUDS Ac Cu 1,2 TEMP. 85.8 °F. 78.4 °F.
Period Type Amount Dry Wet

BAR. 29.98 in. REL. HUM. 72 % WIND 000 ° T. 2 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	29.76	31.20	0.0	0.2	1.6	0.2
10	30.01	32.57				
25	24.89	35.97	0.0	0.0	0.0	0.0

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	29.76	31.20	18.98
10	30.01	32.57	19.92
20	27.40	34.84	22.49

STATION NO. 3-1C-21

DATE 19 8 1951 LAT. 28° 46' N. LONG. 85° 46' W.
Day Month Year

TIME 0659 DEPTH 115 MAX. SAMPLE DEPTH 188 WIRE ANGLE 7 °
GCT Faths. Meters

WATER COLOR - Code WEATHER 01 Code SEA 1 Code SWELL 180 ° Direction T. 1 ft. Hgt.

4 sec. Period CLOUDS Cu Type 2 Amount TEMP. 86.0 °F. Dry 75.3 °F. Wet

BAR. 29.98 in. REL. HUM. 61 % WIND 180 ° Direction T. 2 Force VIS. 8 Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	30.33	30.19	0.0	0.0	2.4	0.4
15	28.50	36.22				
39	22.52	36.38				
64	20.28	36.44	0.1	3.9	1.0	0.4
89	18.50	36.45				
143	12.82	35.77				
188	11.86	35.53	0.9	27.6	0.2	0.0

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	30.33	30.19	18.04
10	29.34	34.21	21.38
20	27.42	36.31	23.59
30	24.72	36.36	24.47
50	21.42	36.41	25.47
75	19.50	36.45	26.02
100	17.34	36.31	26.45
150	12.57	35.72	27.05
200	(11.74)	(35.49)	27.04

( )Extrapolated values.

STATION NO. 3-1C-22

DATE 19 8 1951 LAT. 29° 26' N. LONG. 85° 45' W.
Day Month Year

TIME 1344 DEPTH 15 MAX. SAMPLE DEPTH 25 WIRE ANGLE 0 °
GCT Faths. Meters

WATER COLOR - WEATHER 01 SEA 1 SWELL 160 ° T. 1 ft.
Code Code Code Direction Hgt.

5 sec. CLOUDS Cu 2 TEMP. 86.9 °F. 80.0 °F.
Period Type Amount Dry Wet

BAR. 30.01 in. REL. HUM. 73 % WIND 090 ° T. 1 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	28.94	28.95	0.0	0.0	1.8	0.2
10	29.88	34.13				
25	24.32	36.02	0.0	0.0	0.2	0.2

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	28.94	28.95	17.58
10	29.88	34.13	21.14
20	26.05	35.39	23.33

STATION NO. 3-1C-23

DATE 19 8 1951 LAT. 30° 06' N. LONG. 85° 45' W.
Day Month Year

TIME 1937 DEPTH 10 MAX. SAMPLE DEPTH 18 WIRE ANGLE 0 °
GCT Faths. Meters

WATER COLOR - WEATHER 01 SEA 1 SWELL --- ° T. - ft.
Code Code Code Direction Hgt.

-- sec. CLOUDS -- -- TEMP. 88.7 °F. 80.7 °F.
Period Type Amount Dry Wet

BAR. 30.00 in. REL. HUM. 70 % WIND 180 ° T. 2 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	30.46	33.55	0.1	0.4	1.1	0.4
9	29.92	33.58	0.2	0.0	0.9	0.2
18	28.92	34.52	0.0	0.2	2.0	0.2

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	30.46	33.55	20.50
10	29.72	33.68	20.85

STATION NO. 3-10-24

DATE 20 8 1951 LAT. 29° 43' N. LONG. 86° 10' W.
Day Month Year
TIME 1824 DEPTH 27 MAX. SAMPLE DEPTH 50 WIRE ANGLE 0 °
GCT Faths. Meters
WATER COLOR - WEATHER 01 SEA 1 SWELL 170 ° T. 2 ft.
Code Code Code Direction Hgt.
6 sec. CLOUDS Cu 4 TEMP. 88.7 °F. 80.8 °F.
Period Type Amount Dry Wet
BAR. 30.02 in. REL. HUM. 70 % WIND 135 ° T. 2 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	30.84	29.79	0.1	0.1	1.0	0.0
10	29.50	33.69				
25	23.04	36.26				
50	18.68	36.40	0.4	11.1	0.2	0.7

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	30.84	29.79	17.56
10	29.50	33.69	20.94
20	25.15	34.55	22.98
30	22.37	36.30	25.12
50	18.68	36.40	26.19

STATION NO. 3-1C-25

DATE 20 8 1951 LAT. 29° 30' N. LONG. 86° 28' W.
Day Month Year

TIME 2147 DEPTH 98 MAX. SAMPLE DEPTH 174 WIRE ANGLE 0 °
GCT Faths. Meters

WATER COLOR - WEATHER 00 SEA 1 SWELL -- ° T. 1 ft.
Code Code Code Direction Hgt.

5 sec. CLOUDS 00 -- TEMP. 87.9 °F. 80.2 °F.
Period Type Amount Dry Wet

BAR. 29.99 in. REL. HUM. 71 % WIND 135 ° T. 1 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	31.76	---	0.4[1]	0.0	0.8	0.0
15	29.93	30.09				
40	23.90	36.53				
65	20.34	36.49	0.1	2.8	0.6	---
91	18.55	36.56				
127	15.58	36.22				
174	13.42	35.81	0.8	27.6	2.6	0.7

[1]Cloudy

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	31.76	---	---
10	30.58	---	---
20	28.72	36.22	23.09
30	26.32	36.44	24.04
50	22.43	36.52	25.27
75	19.64	36.52	26.03
100	17.81	36.50	26.48
150	14.32	36.01	26.92

STATION NO. 3-1C-26

DATE 21 8 1951 LAT. 29° 57' N. LONG. 86° 50' W.
Day Month Year

TIME 0236 DEPTH 70 MAX. SAMPLE DEPTH 122 WIRE ANGLE 20 °
GCT Faths. Meters

WATER COLOR - WEATHER 01 SEA 1 SWELL 160 ° T. 3 ft.
Code Code Code Direction Hgt.

6 sec. CLOUDS Ci 2 TEMP. 87.0 °F. 79.4 °F.
Period Type Amount Dry Wet

BAR. 29.99 in. REL. HUM. 71 % WIND 180 ° T. 1 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	30.77	---	0.0	0.2	1.0	0.0
10	28.80	34.83				
23	23.81	36.26				
47	18.69	36.36	0.4	11.0	0.0	0.0
79	16.23	36.15				
122	13.78	35.81	0.9	15.4	0.0	0.8

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	30.77	---	---
10	28.80	34.83	22.02
20	25.00	35.98	24.10
30	22.38	36.29	25.11
50	18.50	36.35	26.20
75	16.55	36.19	26.55
100	15.00	36.00	26.76

STATION NO. 3-1C-27

DATE 21 8 1951 LAT. 30° 15' N. LONG. 87° 17' W.
Day Month Year
TIME 0649 DEPTH 10 MAX. SAMPLE DEPTH 18 WIRE ANGLE 0 °
GCT Faths. Meters
WATER COLOR - WEATHER 00 SEA 1 SWELL 135 ° T. 4 ft.
Code Code Code Direction Hgt.
5 sec. CLOUDS 00 00 TEMP. 86.4 °F. 79.3 °F.
Period Type Amount Dry Wet
BAR. 30.02 in. REL. HUM. 73% WIND 225 ° T. 1 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	31.39	---	0.0	0.0	0.2	0.1
18	27.56	36.17	0.0	0.2	0.6	0.0

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	31.39	---	---
10	29.05	---	---

STATION NO. 3-1C-28

DATE 21 8 1951 LAT. 29° 53' N. LONG. 87° 45' W.
Day Month Year

TIME 1129 DEPTH 17 MAX. SAMPLE DEPTH 25 WIRE ANGLE 0 °
GCT Faths. Meters

WATER COLOR - WEATHER 01 SEA 1 SWELL 170 ° T. 10 ft.
Code Code Code Direction Hgt.

7 sec. CLOUDS Ci 3 TEMP. 85.3 °F. 78.5 °F.
Period Type Amount Dry Wet

BAR. 29.99 in. REL. HUM. 74 % WIND 000 ° T. 1 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	30.81	31.60	0.1	0.4	1.0	0.4
10	27.48	35.17				
25	22.91	36.29	0.1	0.1	0.1	0.2

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t
0	30.81	31.60	18.93
10	27.48	35.17	22.71
20	24.30	35.97	24.31

Figure 18.--Locations of stations occupied on Cruise 4-2A.

STATION NO. 4-2A-1

DATE 9 1 1952 LAT. 27°18' N. LONG. 92°35' W. TIME 2258 GCT
(Day Mo. Year)

DEPTH 560 Faths. MAX. SAMPLE DEPTH 895 Meters WIRE ANGLE 30°

WEATHER 03 Code SEA 3 Code SWELL - Direction ° T. - ft. Hgt. - sec. Period

CLOUDS Sc. Cu. Type 2 10 Amount TEMP. 74.2 °F. Dry 69.8 °F. Wet BAR. 30.05 in.

REL. HUM. 80 % WIND 200 Direction T. 2 Force VIS. 7 Code

OBSERVED VALUES

Depth	Temp. °C	Sal. o/oo	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	22.86	36.47	0.6	0.0	0.0	1.3	0.1
10	22.86	36.25	0.9	0.1	0.0	2.0	0.1
24	22.90	36.51	0.4	0.0	0.0	3.2	
46	22.62	36.50	0.5	0.0	0.0		
69	22.25	36.40	0.5	0.1	0.0		
92	20.10	36.45	1.1	0.6	10.0	1.0	
143	15.67	36.18	1.3	1.0	21.0		0.0
191	14.04	35.91		1.6	30.0		
286	10.86	35.39	1.6	1.5	30.0		
388	8.78	35.13		1.9	37.0	2.2	0.1
486	7.50	34.91	2.2	1.8	45.0	0.9	
590	6.54	34.88	2.0	1.8	37.0	0.5	0.0
690	5.87	34.97	1.9	1.9	40.5		
795	5.03	34.88	1.7	1.8	37.0		
895	4.95	34.97	1.8	1.6	38.0		

STATION NO. 4-2A-1

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. o/oo	O_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	22.86	36.47	25.11	0.6	0.0	0	1.3	0.1
10	22.86	36.25	24.94	0.9	0.1	0	2.0	0.1
20	22.90	36.39	25.04	0.5	0.0	0	2.9	
30	22.80	36.51	25.16	0.4	0.0	0	3.0	
50	22.55	36.48	25.20	0.5	0.0	0	2.4	
75	22.00	36.41	25.31	0.6	0.2	3	1.6	
100	18.50	36.40	26.24	1.1	0.7	12	1.0	
150	15.35	36.15	26.80	1.3	1.1	22	1.3	0.0
200	13.55	35.84	26.95	1.4	1.6	30	1.5	
250	11.74	35.53	27.07	1.5	1.5	30	1.7	
300	10.50	35.34	27.15	1.6	1.6	31	1.9	
400	8.60	35.09	27.27	1.9	1.9	38	2.0	0.1
500	7.37	34.90	27.31	2.2	1.8	44	0.8	
600	6.47	34.89	27.43	2.0	1.8	37	0.5	0.0
700	5.75	34.97	27.58	1.9	1.9	40	0.2	
800	5.02	34.88	27.60	1.7	1.8	37	0.1	

STATION NO. 4-2A-2

DATE 10 1 1952 LAT. 26°42' N. LONG. 91°59' W. TIME 0652
Day Mo. Year GCT

DEPTH 880 MAX. SAMPLE DEPTH 1179 WIRE ANGLE 20°
Faths. Meters

WEATHER 60 SEA 3 SWELL - ° T - ft. - sec.
Code Code Direction Hgt. Period

CLOUDS Sc. 10 TEMP. 70.0°F 66.5°F. BAR. 30.18 in.
Type Amount Dry Wet

REL. HUM: 83 % WIND 340° T. 5 VIS. 6
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. o/oo	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	22.64	---		0.0	0.0	1.9	0.2
10	22.65	36.31	0.4	0.3	0.0	1.2	
29	22.65	36.43	0.3	0.1	1.0	1.7	
57	22.55	36.43	1.5	0.1	0.0	1.6	
85	19.09	36.53	0.8	0.6	11.0		
133	17.40	36.17	0.9	0.7	17.0	1.3	0.4
170	13.44	35.66	1.3	1.4	27.	1.2	
228	11.60	35.41	1.5	2.3	33.0		
341	9.75	35.18	1.3	1.7	37.4	0.0	0.1
452	7.80	34.97	1.8	2.1	39.4	4.7	0.1
567	6.52	34.88	1.9	2.3	43.		
678	5.72	34.91	2.2	2.2	37.		
907	4.75	34.92	1.6		37.		
1179	4.32	34.91	1.7	1.7	35.		

STATION NO. 4-2A-2

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. o/oo	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	22.64	(36.35)	25.08		0.0	0	1.9	0.2
10	22.65	36.31	25.05	0.4	0.3	0	1.2	
20	22.70	36.40	25.10	0.3	0.2	0	1.4	
30	22.65	36.43	25.14	0.3	0.1	1	1.7	
50	22.60	36.43	25.15	1.2	0.1	0	1.6	
75	20.10	36.50	25.90	1.1	0.4	5	0.8	
100	18.75	36.45	26.21	0.8	0.6	15	0.7	
150	16.60	35.87	26.43	1.1	1.0	24	1.3	0.4
200	12.25	35.49	26.94	1.4	1.9	32	1.0	
250	11.30	35.36	27.02	1.5	2.2	36	0.6	
300	10.45	35.26	27.10	1.4	2.0	37	0.3	0.1
400	8.61	35.07	27.25	1.6	1.9	39	2.5	0.1
500	7.22	34.92	27.35	1.8	2.2	40		0.1
600	6.24	34.88	27.45	2.0	2.3	41		
700	5.57	34.91	27.56	2.1	2.2	37		
800	5.14	34.92	27.62	1.9	1.9	37		
1000	4.52	34.92	27.69	1.6	1.9	36		
1200	(4.29)	(34.91)	27.71		2.4			
1500							1.1	

() Extrapolated values.

STATION NO. 4-2A-6

DATE 11 (Day) 1 (Mo.) 1952 (Year) LAT. 24°46' N. LONG. 90°06' W. TIME 1255 GCT

DEPTH 1900 Faths. MAX. SAMPLE DEPTH 2252 Meters WIRE ANGLE 27 °

WEATHER 02 Code SEA 3 Code SWELL 45 ° Direction T. 8 ft. Hgt. 6 sec. Period

CLOUDS Sc. Type 9 Amount TEMP. 70.5°F. Dry 64.0°F. Wet BAR. 30.40 in.

REL. HUM. 70 % WIND 090° Direction T. 3 Force VIS. 7 Code

OBSERVED VALUES

Depth	Temp. °C	Sal. o/oo	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	23.51	36.44	0.5	0.4	0		
13	23.54	36.37		0.2	0	1.8	
31	23.54	36.31	0.4	0.0	0		
66	23.36	36.36	0.4		-		
97	19.81	36.41	1.4	0.8	14	2.6	
132	17.26	36.19	1.4	0.8	20	3.8	
197	13.98	35.75	1.2	0.9	25		
262	11.92	35.43	1.8	1.3	32		
387	9.15	35.19	2.8	2.2	43		
519	7.15	34.98	2.4	2.3	36	0.0	0.4
643	5.68	35.14	2.5	1.9	24	0.7	
774	5.44	34.97	2.4	1.6	40		
1032	4.58	34.97	2.6	1.6	35	1.8	
1294	4.27	34.97	2.2	1.4	34	1.2	
1570	4.66	34.97	2.2	1.7	-	0.3	-
2252	4.20	34.99	2.1	1.5	27		

STATION NO. 4-2A-6

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. o/oo	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot Mg/l
0	23.51	36.44	24.90	.5	0.4	0		
10	23.51	36.39	24.86	.5	0.2	0		
20	23.50	36.34	24.82	.4	0.1	0	1.8	
30	23.49	36.31	24.80	.4	0.0	0	2.6	
50	23.47	36.33	24.82	.4	-	1	3.0	
75	22.70	36.38	25.09	.7	-	6	2.8	
100	19.60	36.41	25.96	1.4	0.8	15	2.7	
150	16.10	36.05	26.55	1.3	0.8	21	3.6	
200	13.72	35.71	26.81	1.2	0.9	25		
250	12.31	35.47	26.91	1.7	1.1	31		
300	10.90	35.35	27.08	2.1	1.6	35		
400	9.00	35.16	27.26	2.8	2.2	42		
500	7.38	34.98	27.37	2.5	2.3	37	0.2	0.4
600	6.08	34.98	27.55	2.5	2.0	26	0.5	
700	5.52	34.97	27.61	2.5	1.8	31	0.8	
800	5.33	34.97	27.63	2.4	1.6	39	1.2	
1000	4.65	34.97	27.71	2.6	1.6	36	1.7	
1200	4.31	34.97	27.75	2.3	1.4	34	1.4	
1500	4.57	34.97	27.72	2.2	1.6	33	0.5	
2000	4.48	34.98	27.74	2.1	1.5	29		

STATION NO: 4-2A-7

DATE 11 1 1952 LAT. 24°15' N. LONG. 89°32' W. TIME 2148 GCT
(Day Mo. Year)

DEPTH 1890 Faths. MAX. SAMPLE DEPTH 2500 Meters WIRE ANGLE 5 °

WEATHER 02 Code SEA 4 Code SWELL - ° Direction T. - ft. Hgt. - sec. Period

CLOUDS Sc Type 8 Amount TEMP. 71.0°F. Dry 63.8°F. Wet BAR. 30.39 in.

REL. HUM. 68 % WIND 120° Direction T. 3 Force VIS. 7 Code

OBSERVED VALUES

Depth	Temp. °C	Sal. o/oo	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	23.90	36.43	.6	0.1	3		
15	23.88	36.45	.8	0.1	0		
36	23.84	36.41	.4	0.1	0	0.6	
76	---	36.40	.6	0.0	1		
111	19.28	36.40	2.2		12		
151	16.54	36.23	1.2	0.7	22		
227	13.47	35.68	2.0	1.2	25	3.0[a]	
302	11.16	35.99			-		
447	8.39	35.00	3.0	1.9	32	0.7	
602	6.76	34.90	3.0	1.9	38	1.6[a]	
748	5.67	34.90	3.1	1.9	40	0.0	
903	5.05	34.88	2.2	1.9	28	1.8	
1204	4.40	34.90	1.5	1.6	35	1.8	
1504	4.21	34.96	2.1	1.7	26		
1804	4.20	36.95	.7	0.4	8		
2485	4.20	34.97	2.1	1.4	29		

(a) Green carbohydrates.

STATION NO. 4-2A-7

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. o/oo	O_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Pro Mg/
0	23.90	36.43	24.77	.6	0.1	3	2.2	
10	23.85	36.44	24.80	.7	0.1	0	1.8	
20	23.80	36.45	24.82	.6	0.1	0	1.3	
30	23.75	36.42	24.81	.5	0.1	0	0.8	
50	23.50	36.40	24.87	.5	0.1	0	0.8	
75	22.10	36.40	25.27	.6	0.0	1		
100	20.30	36.40	25.77	1.7	0.2	9		
150	16.56	36.24	26.59	1.2	0.7	22		
200	14.53	35.84	26.74	1.7	1.0	24	2.7	
250	12.55	35.50	26.89	2.1	1.3	26	2.8	
300	11.15	35.31	27.01	2.3	1.4	27	2.2	
400	9.18	35.06	27.16	2.8	1.8	31	1.2	
500	7.80	34.96	27.29	3.0	1.9	34	1.0	
600	6.78	34.90	27.39	3.0	1.9	38	1.6	
700	5.96	34.90	27.50	3.1	1.9	40	0.5	
800	5.42	34.90	27.57	2.8	1.9	36	0.6	
1000	4.80	34.88	27.62	2.0	1.8	30	1.8	
1200	4.40	34.90	27.69	1.5	1.6	35	1.8	
1500	4.25	34.96	27.75	2.1	1.7	26		
2000	4.20	34.97	27.76	1.1	0.7			
2500	(4.20)	(34.97)	27.76	2.1	1.4	29		

() Extrapolated values.

STATION NO. 4-2A-8

DATE 12 1 1952 (Day Mo. Year) LAT. 23°47' N. LONG. 88°55' W. TIME 1139 GCT

DEPTH 87 Faths. MAX. SAMPLE DEPTH 149 Meters WIRE ANGLE 6 °

WEATHER 01 Code SEA 3 Code SWELL 090 ° Direction T. 5 ft. Hgt. 6 sec. Period

CLOUDS Sc Type 3 Amount TEMP. 74.1°F. Dry 67.4°F. Wet BAR. 30.28 in.

REL. HUM. 71 % WIND 090° Direction T. 3 Force VIS. 7 Code

OBSERVED VALUES

Depth	Temp. °C	Sal. o/oo	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.03	36.48	.5	0.2	0		0.0
10	24.15	36.45	.4	0.2	0	0.0	
20	24.16	36.45	.8	0.0	0		
45	24.16	36.43	1.5	0.1	2		
85	23.49	36.56	.5	0.2	0	2.0	
114	19.68	36.42	.8	0.4	11		
149		36.33	1.9	1.0	17		

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. o/oo	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.03	36.48	24.77	0.5	0.2	0	0	0.0
10	24.15	36.45	24.71	0.4	0.2	0	0	
20	24.16	36.45	24.71	0.8	0.0	0	0.3	
30	24.15	36.44	24.71	1.1	0.0	1	0.5	
50	24.05	36.43	24.73	1.4	0.1	2	1.0	
75	23.68	36.53	24.91	0.7	0.2	0	1.6	
100	22.30	36.55	25.33	0.6	0.3	6		
150				1.9	1.0	17		

STATION NO. 4-2A-9

DATE 12 (Day) 1 (Mo.) 1952 (Year) LAT. 23°19' N. LONG. 88°29' W. TIME 1908 GCT

DEPTH 48 Faths. MAX. SAMPLE DEPTH 85 Meters WIRE ANGLE 0 °

WEATHER 02 Code SEA 3 Code SWELL - ° Direction T. - ft. Hgt. - sec. Period

CLOUDS Sc. Type 9 Amount TEMP. 76.8 °F. Dry 69.4 °F. Wet BAR. 30.27 in.

REL. HUM. 69 % WIND 090° Direction T. 3 Force VIS. 9 Code

OBSERVED VALUES

Depth	Temp. °C	Sal. o/oo	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.40	36.41	.5	0.0	0	1.6	
10	24.39	36.42	.7	0.0	0	1.3	
25	24.42	36.31	1.2	0.0	0	2.4	
45	24.36	36.34	.4	0.1	0	0.7	
65	23.84	36.36	.6	0.0	3		
85	20.73	36.51	1.0	0.5	9	1.2	

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. o/oo	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.40	36.41	24.61	0.5	0.0	0	1.6	
10	24.39	36.42	24.62	0.7	0.0	0	1.3	
20	24.40	36.37	24.58	1.0	0.0	0	2.0	
30	24.40	36.32	24.54	1.0	0.0	0	2.0	
50	24.23	36.35	24.61	0.4	0.1	1	0.7	
75	23.40	36.39	24.89	0.8	0.3	5	1.1	

STATION NO. 4-2A-10

DATE 13 (Day) 1 (Mo.) 1952 (Year) LAT. 22°48' N. LONG 88°00' W. TIME 0044 GCT

DEPTH 34 Faths. MAX. SAMPLE DEPTH 50 Meters WIRE ANGLE - °

WEATHER 01 (Code) SEA 2 (Code) SWELL 040 (Direction) ° T. 4 (Hgt.) ft. 5 (Period) sec.

CLOUDS Sc (Type) 3 (Amount) TEMP 75.1 (Dry) °F 67.0 (Wet) °F. BAR. 30.26 in.

REL. HUM. 66 % WIND 090° (Direction) T. 2 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. o/oo	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.24	36.53	.6	0.0	0	1.1	
10	24.23	36.25	1.8	1.5	4	1.9*	
30	24.25	36.36	.8	0.0	-		
40	24.31	36.51	.6		1		
50	24.22	36.61	.7	0.2	0	2.8	

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. o/oo	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.24	36.53	24.75	0.6	0.0	0	1.1	
10	24.23	36.25	24.54	1.8	1.5	4	1.9	
20	24.23	36.30	24.58	1.3	0.8	3	2.1	
30	24.25	36.36	24.62	0.8	0.0	2	2.4	
50	24.22	36.61	24.81	0.7	0.2	0	2.8	

*Contaminated.

STATION NO. 4-2A-11

DATE 13 1 1952 LAT. 22°18' N. LONG 87°30' W. TIME 0652 GCT
(Day Mo. Year)

DEPTH 26 Faths. MAX. SAMPLE DEPTH 42 Meters WIRE ANGLE 0 °

WEATHER 00 (Code) SEA 3 (Code) SWELL 045 (Direction) ° T. 4 (Hgt.) ft. 5 (Period) sec.

CLOUDS -- (Type) 0 (Amount) TEMP. 74.5 (Dry) °F. 68.0 (Wet) °F. BAR. 30.14 in.

REL. HUM. 72 % WIND 090 (Direction) ° T. 2 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. o/oo	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	23.49	36.35	1.4	0.0	-	1.5	
7	23.48	36.67	2.1	0.0	0	1.8	
12	23.48	36.56	.7	0.1	0		
22	23.44	36.33	.5	0.1	-	0.1	
32	21.44	36.55	1.2	0.4	7		
42	21.43	36.69	.9	0.4	9		

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. o/oo	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot Mg/l
0	23.49	36.35	24.83	1.4	0.0		1.5	
10	23.48	36.67	25.08	1.3	0.0	0	1.5	
20	23.45	36.40	24.88	0.5	0.1	2	0.3	
30	21.45	36.45	25.49	1.1	0.3	6		

STATION NO. 4-2A-12

DATE 13 (Day) 1 (Mo.) 1952 (Year) LAT. 21°53' N. LONG. 87°02' W. TIME 1249 GCT

DEPTH 14 Faths. MAX. SAMPLE DEPTH 22 Meters WIRE ANGLE 15 °

WEATHER 02 Code SEA 3 Code SWELL 090 ° Direction T. 8 ft. Hgt. 6 sec. Period

CLOUDS Sc Type 9 Amount TEMP. 74.5°F. Dry 66.7°F. Wet BAR. 30.24 in.

REL. HUM. 66 % WIND 090 ° Direction T. 4 Force VIS. 8 Code

OBSERVED VALUES

Depth	Temp. °C	Sal. o/oo	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	22.95	36.08	2.5				
10	21.18	36.35	2.4	0.3	6		
14	20.91	36.31	.8	0.3	8		0.1
22	20.92	36.33	2.8	0.2	8		

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. o/oo	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	22.95	36.08	24.79	2.5				
10	21.18	36.35	25.49	2.4	0.3	6	0.2	0.1
20	20.92	36.32	25.54	2.3	0.2	8		

STATION NO. 4-2A-14

DATE 14 (Day) 1 (Mo.) 1952 (Year) LAT. 21°37' N. LONG. 86°23' W. TIME 0022 GCT

DEPTH 400 Faths. MAX. SAMPLE DEPTH 458 Meters WIRE ANGLE 38 °

WEATHER 01 (Code) SEA 2 (Code) SWELL - (Direction) ° T. - (Hgt.) ft. - (Period) sec.

CLOUDS Sc (Type) 6 (Amount) TEMP. 76.7 °F. (Dry) 69.8 °F. (Wet) BAR. 30.20 in.

REL. Hum. 71 % WIND 090 (Direction) ° T. 2 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. o/oo	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.48	35.75	.4	0.1	0	0.5	
9	26.52	35.80	.4	0.0	0		
22	26.52	36.07	.6	0.1	0		
44	---	36.04	.5	0.0	1	2.8	
65	24.65	36.47	.6	0.1	3	0.4	
85	22.52	36.87	1.2	0.2	7		
130	---	36.43	.9	0.5	15		
164	10.45	36.25	1.2	0.5	14	0.0	0.2
200	---	36.32	1.6	0.6	14	1.8	
235	15.07	---	.5		3		-
277	14.29	35.81	1.4		19		0.1
362	12.07	35.67	1.8	1.2	31		
458	7.83	35.13	2.0	1.4	35	0.7	

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. o/oo	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot Mg/l
0	26.48	35.75	23.47	0.4	0.1	0	0.5	
10	26.52	35.82	23.51	0.4	0.0	0	1.0	
20	26.52	36.00	23.64	0.6	0.1	0	1.5	
30	26.45	36.07	23.72	0.6	0.1	0	2.1	
50	26.00	36.15	23.92	0.5	0.0	1	2.1	
75	24.00	36.70	24.95	0.9	0.2	5	0.4	
100	21.50	36.83	25.77	1.1	0.3	9	0.3	
150	18.30	36.31	26.22	1.1	0.5	14	0.1	0.0
200	16.15	36.08	26.56	1.6	0.6	14	1.8	
250	14.80	35.87	26.70	0.8	0.8	17	1.6	
300	13.93	35.77	26.81	1.5	1.0	22	1.4	0.1
400	10.50	35.50	27.27	1.9	1.3	33	0.9	

STATION NO. 4-2A-14A

ATE 14 (Day) 1 (Mo.) 1952 (Year) LAT. 21°37' N. LONG. 86°23' W. TIME 0212 GCT

EPTH 400 Faths. MAX. SAMPLE DEPTH 511 Meters WIRE ANGLE 45 °

EATHER 01 Code SEA 2 Code SWELL - Direction ° T. - ft. Hgt. - sec. Period

LOUDS Sc Type 4 Amount TEMP. 76.3°F. Dry 67.4 °F. Wet BAR. 30.22 in.

EL. HUM. 62 % WIND 100 Direction ° T. 4 Force VIS. 8 Code

OBSERVED VALUES

Depth	Temp. °C	Sal. o/oo	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.52	35.86		0.0	0		
68	24.38	36.47	.4	0.0	4	0.0	
171	17.20	36.28	1.2	1.0	15		0.3
174	---	36.46	1.2	0.7	17	0.6	
332	11.80	35.68	2.0	1.4	29	0.1	
415	10.16	35.23	2.0		32		
511	7.61	34.97	2.9	1.8	37		

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. o/oo	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.52	35.86	23.54		0.0	0		
10	26.39	35.95	23.65		0.0	1		
20	26.20	36.06	23.79		0.0	1		
30	25.98	36.15	23.93		0.0	2		
50	25.20	36.32	24.30		0.0	3		
75	23.90	36.47	24.80	0.5	0.1	5	0.0	
100	21.65	36.43	25.42	0.7	0.3	7	0.2	
150	18.25	36.33	26.25	1.1	0.8	13	0.5	0.3
200	16.45	36.21	26.59	1.3	0.8	19	0.5	
250	14.45	36.08	26.94	1.6	1.0	23	0.4	
300	12.65	35.85	27.14	1.8	1.3	27	0.2	
400	10.45	35.29	27.12	2.0	1.6	31	0.5	
500	7.93	34.99	27.30	2.8	1.8	36	1.1	

STATION NO. 4-2A-15

DATE 14 (Day) 1 (Mo.) 1952 (Year) LAT. 21°43' N. LONG. 86°02' W. TIME 0643 GCT

DEPTH 950 Faths. MAX. SAMPLE DEPTH 1241 Meters WIRE ANGLE 33 °

WEATHER 02 (Code) SEA 3 (Code) SWELL - (Direction) ° T. - (Hgt.) ft. - (Period) sec.

CLOUDS Sc (Type) 7 (Amount) TEMP. 76.1°F. (Dry) 65.6 °F. (Wet) BAR. 30.20 in.

REL. HUM. 57 % WIND 100 (Direction) ° T. 3 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. o/oo	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.71	35.74	.2	0.2	0	0.0	
13	26.68	35.71	.4	0.1	0	1.8	
28	26.69	35.84	.7		0		0.4
61	---	35.61	.8	0.0	1		
89	25.16	36.15	.5	0.0	2		
121	23.57	36.60	.2	0.1	4	1.2	0.0
181	20.44	37.09	1.1		5		
239	18.47	36.56	.7	0.4	11	1.9	
348	15.06	35.84	1.5	0.9	19		
457	11.47	35.39	4.3	1.0	29		0.1
559	9.44	34.98	2.4		29		
669	---	35.13	3.0	1.6	32		
810	6.10	34.91	2.0	1.8	37	7.2	
1022	4.95	34.97	1.9	2.2	37		
1241	4.40	34.99	1.8	1.5	32		

STATION NO. 4-2A-15

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. o/oo	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.71	35.74	23.39	0.2	0.2	0	0.0	
10	26.71	35.71	23.37	0.3	0.1	0	1.4	
20	26.69	35.77	23.42	0.5	0.1	0	1.7	
30	26.69	35.84	23.47	0.7	0.1	0	1.7	0.4
50	26.35	35.70	23.47	0.8	0.0	1	1.6	
75	25.70	35.90	23.83	0.6	0.0	2	1.4	
100	24.53	36.33	24.51	0.4	0.0	3	1.3	0.0
150	21.90	37.00	25.78	0.6	0.2	4	1.4	
200	19.83	37.07	26.40	1.0	0.3	7	1.7	
250	18.30	36.46	26.33	0.8	0.5	12	2.0	
300	16.60	36.11	26.48	1.1	0.7	15	2.7	
400	13.03	35.66	26.92	2.8	0.9	24	3.7	
500	10.50	35.07	26.94	3.5	1.1	29	4.6	0.1
600	8.85	35.01	27.17	2.6	1.4	30	5.5	
700	7.43	35.11	27.46	2.8	1.6	33	6.3	
800	6.13	34.92	27.49	2.1	1.8	37	7.2	
1000	5.00	34.96	27.66	1.9	2.2	37		
1200	4.50	34.99	27.75	1.8	1.6	32		

STATION NO. 4-2A-16

DATE 14 1 1952 (Day Mo. Year) LAT. 21°50' N. LONG. 85°35' W. TIME 1247 GCT

DEPTH 1120 Faths. MAX. SAMPLE DEPTH 1918 Meters WIRE ANGLE 18 °

WEATHER 00 (Code) SEA 3 (Code) SWELL 045 (Direction) ° T. - (Hgt.) ft. 7 (Period) sec

CLOUDS Sc (Type) 1 (Amount) TEMP. 73.5 (Dry) °F. 65.5 (Wet) °F. BAR. 30.13 in

REL. HUM. 65 % WIND 090 (Direction) ° T. 3 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. o/oo	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Pro Mg/
0	26.61	35.79	.2	0.2	0		0.
15	26.60	35.88	.7	0.1	0	0.3	
33	26.60	36.09	.6		0		
71	26.65	36.02	1.2	0.1	0		
103	26.55	36.09	.5		0		
140	25.11	36.00	.5		0		
208	23.81	35.94	.2		0		
276	21.03	36.60	.4		3		
400	---	36.55	.7	0.4	12	0.8	
527	14.24	35.94	1.4		22		
643	10.82	35.13	2.5	1.6	38		
764	8.78	35.08	2.2	1.8	47		
1000	5.17	35.00	2.3		31		
1250	4.37	34.94	2.1	1.6	27		
1526	4.18	34.93	2.1	1.5	29		
1918	4.05	35.90					

STATION NO. 4-2A-16

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.61	35.79	23.46	0.2	0.2	0		0.1
10	26.61	35.85	23.50	0.5	0.1	0	0.3	
20	26.60	35.96	23.59	0.7	0.1	0	0.3	
30	26.60	36.09	23.69	0.6	0.1	0		
50	26.60	36.10	23.69	0.8	0.1	0		
75	26.62	36.10	23.69	1.1	0.1	0		
100	26.60	36.09	23.69	0.5		0		
150	24.95	35.99	24.12	0.5		0		
200	24.11	35.94	24.34			0		
250	21.90	36.53	25.43			2		
300	20.30	36.62	25.93			5		
400	17.60	36.55	26.57		0.4	12	0.8	
500	15.10	36.22	26.91	1.4	0.9	20		
600	12.01	35.27	26.82	2.1	1.4	32		
700	9.91	35.10	27.06	2.4	1.7	43		
800	8.12	35.07	27.33	2.2	1.8	45		
1000	5.17	35.00	27.68	2.3	1.7	31		
1200	4.48	34.94	27.71	2.1	1.6	28	1.4	
1500	4.20	34.93	27.73	2.1	1.5	29		
2000	(4.00)	(34.92)	27.74					

Extrapolated values.

STATION NO. 4-2A-17

DATE 14 (Day) 1 (Mo.) 1952 (Year) LAT. 21°54' N. LONG. 85°23' W. TIME 1859 GCT

DEPTH 970 Faths. MAX. SAMPLE DEPTH 1592 Meters WIRE ANGLE 10 °

WEATHER 01 (Code) SEA 3 (Code) SWELL - (Direction) ° T. - (Hgt.) ft. - (Period) sec.

CLOUDS Sc (Type) 5 (Amount) TEMP. 76.6 °F. (Dry) 68.8 °F. (Wet) BAR. 30.19 in.

REL. HUM. 67 % WIND 090 (Direction) ° T. 3 (Force) VIS. 10 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.55	35.90	.3		0		
10	26.54	35.86	.6	0.2	0		
24	26.52	35.90	.8		1		0.4
53	26.56	35.93	.4		0		
78	26.53	36.13	1.3	0.0	0	0.2	
108	25.85	36.27	.8		0		
162	24.72	35.91	.5		0		
216	20.55	36.75	1.5		7		
326	17.06	36.44	1.0	0.5	14		
440	15.04	36.56	1.8		19		
550	11.29	35.42	2.0	1.2	30		
650	9.40	34.95	2.7	1.7	39		
874	6.25	35.20	2.5	1.8	19		
1089	4.93	34.99	2.6		34		
1293	4.39	34.97	2.0		29		
1592	4.15	35.02	2.0		29		

STATION NO: 4-2A-17

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.55	35.90	23.56	0.3		0		
10	26.54	35.86	23.53	0.6	0.2	1	1.5	
20	26.53	35.90	23.57	0.7	0.2	1		0.4
30	26.52	35.91	23.58	0.7	0.1	1		
50	26.53	35.93	23.59	0.5	0.1	0		
75	26.52	36.10	23.72		0.0	0	0.2	
100	26.10	36.25	23.97	0.8		0		
150	25.05	35.97	24.08	0.6		0		
200	21.25	36.72	25.75	1.2		5		
250	19.10	36.69	26.30	1.3		9		
300	17.58	36.54	26.57	1.1	0.5	12	4.2	
400	15.83	36.20	26.73	1.5	0.7	17	4.3	
500	12.85	35.70	26.98	1.9	1.0	25	3.9	
600	10.29	35.06	26.97	2.4	1.5	35	3.8	
700	8.52	34.95	27.18	2.6	1.7	35		
800	7.10	34.96	27.39	2.6	1.8	26		
1000	5.45	34.99	27.63	2.6		28		
1200	4.61	34.96	27.71	2.3		31		
1500	4.16	35.01	27.80	2.0		29		

STATION NO. 4-2A-18

VALUES AT STANDARD DEPTHS

Depth	Temp. °C.	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.45	36.10	23.74	.5		0		
10	26.44	35.92	23.61	.5	0.0	0	1.0	
20	26.42	35.94	23.63	1.0	0.0	0		
30	26.42	35.95	23.64	1.1	0.0	0		
50	26.44	35.93	23.62	1.2	0.0	0		
75	26.42	35.97	23.65	0.6	0.0	2		
100	26.43	35.99	23.67	0.4	0.0	0	1.1	
150	23.75	36.17	24.62	0.7	0.0	8	2.6	0.0
200	20.75	36.50	25.72	0.7	0.6	0	3.4	
250	18.60	36.59	26.36	1.2	0.1	11	3.1	0.4
300	17.50	36.55	26.60	0.8	0.3	12	2.8	
400	15.27	36.03	26.72	1.4	0.8	2	2.1	
500	13.10	35.66	26.90	1.6	1.0	31	0.1	
600	10.75	35.32	27.09	1.9				0.0

STATION NO. 4-2A-18

DATE 15 (Day) 1 (Mo.) 1952 (Year) LAT. 21°52' N. LONG. 85°01' W. TIME 1759 GCT

DEPTH 400 (Faths.) MAX. SAMPLE DEPTH 611 (Meters) WIRE ANGLE 10 °

WEATHER 01 (Code) SEA 3 (Code) SWELL - (Direction) ° T. - (Hgt.) ft. - (Period) sec.

CLOUDS Sc (Type) 1 (Amount) TEMP. 77.2 (Dry) °F. 71.0 (Wet) °F. BAR. 30.18 in.

REL. HUM. 74 % WIND 135 (Direction) ° T. 4 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.45	36.10	.5		0		
10	26.44	35.92	.5	0.0	0	1.0	
24	26.41	35.95	1.1		0		
49	26.44	35.93	1.2	0.0	0		
73	26.42	35.97	.6		2		
98	26.45	35.99	.4		0		
152	23.08	36.18	.7	0.0	8	1.1	0.0
202	23.14	36.51	.7	0.6	0	2.7	
251	18.52	37.42	1.2	0.1	11	3.4	0.4
301	---	36.55	.8		12		
356	---	36.17			21		-
406	15.11	36.02	1.4	0.8	0		
456	16.27	35.94	1.3	0.1	30		
506	12.98	35.61	1.6	1.1	31	0.0	
611	10.64	35.30	1.9				0.0

STATION NO. 4-2A-18A

DATE 15 (Day) 1 (Mo.) 1952 (Year) LAT: 21°52' N. LONG. 85°03' W. TIME 1911 GCT

DEPTH 700 (Faths.) MAX. SAMPLE DEPTH 1241 (Meters) WIRE ANGLE 16 °

WEATHER 01 (Code) SEA 3 (Code) SWELL - (Direction) ° T. 4 (Hgt.) ft. 8 (Period) sec.

CLOUDS Cu AC Cs (Type) 4 (Amount) TEMP. 78.0 (Dry) °F. 71.9 (Wet) °F. BAR. 30.14 in.

REL. HUM. 75 % WIND 080 (Direction) ° T. 4 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.49	35.96	.9		0		
23	26.46	35.99	.7	0.0	2		
72	26.46	35.91	.7	0.0	1		
96	26.51	36.09	.7	0.0	0	0.1	
151	23.74	36.69	.8	0.1	2		
200	20.99	36.74	.8		8		
300	17.32	36.45	1.4		12		
356	16.15	36.03	1.3		18		
406	15.11	36.08	1.3	0.8	11		0.3
508	13.22	35.77	1.6	1.3	26		0.5
615	10.50	35.31	1.9		32		0.2
717	9.28	35.17	2.2		36		
820	6.94	34.86	2.4	1.8	35	0.4	
959	5.56	34.90	2.3		39		0.2
1087	4.70	34.96	1.8		36		0.0

STATION NO. 4-2A-18A

VALUES AT STANDARD DEPTHS

Depth	Temp. ° C.	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. mg/l	Prot. Mg/l
0	26.49	35.96	23.62	0.9		0		
10	26.47	35.97	23.64	0.8		1		
20	26.46	35.99	23.66	0.7	0.0	2		
30	26.46	35.99	23.66	0.7	0.0	2		
50	26.40	35.96	23.65	0.7	0.0	2		
75	26.45	35.91	23.60	0.7	0.0	1		
100	26.50	36.20	23.80	0.7	0.0	0	0.1	
150	23.74	36.69	25.02	0.8	0.1	2		
200	20.99	36.74	25.84	0.8		8		
250	19.00	36.70	26.34	1.1		10		
300	17.32	36.45	26.57	1.4		12		
400	15.25	36.09	26.77	1.3	0.8	12		0.3
500	13.39	35.80	26.95	1.6	1.3	25		0.5
600	10.73	35.37	27.13	1.9		31		0.2
700	9.50	35.19	27.20	2.1		35		
800	7.26	34.86	27.29	2.4	1.8	35	0.4	
1000	5.27	34.92	27.60	2.1		38		0.1
1200				1.6		23		

STATION NO. 4-2A-19

DATE 16 1 1952 (Day Mo. Year) LAT. 22°16' N. LONG. 84°54' W. TIME 0023 GCT

DEPTH 750 Faths. MAX. SAMPLE DEPTH 1100 Meters WIRE ANGLE 23 °

WEATHER 02 Code SEA 2 Code SWELL - ° Direction T. - ft. Hgt. - sec. Period

CLOUDS Sc Type 9 Amount TEMP. 77.4 °F. Dry 70.0 °F. Wet BAR 30.13 in.

REL. HUM. 69 % WIND 060 ° Direction T. 3 Force VIS. 9 Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.20	35.92	.4		6		
23	26.23	35.98	1.7	0.0	0	0.4	0.5
68	26.23	36.01	.3		2		
92	26.10	36.00	.6		0		
143	23.51	36.44	.8		5		
187	21.72	36.82	.5		9		
275	18.97	36.07	.6		1		
322	17.09	36.34	1.0		14		
365		36.10	1.0		0		
450	14.55	36.52	1.2		9	0.2	
540	12.19	35.90	1.6	1.3	32		
626	9.51	35.14	2.5	1.6	42		
714	8.15	34.98	2.3	1.8	43	0.8	0.1
837	6.27	36.32	.2	0.1	2		0.1
955	5.09	34.88	2.4	1.9	36	3.5	
1100	4.96	34.93	2.5		31		

VALUES AT STANDARD DEPTHS

epth	Temp. °C.	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.20	35.92	23.69	0.4		6		
10	26.21	35.95	23.70	1.0		3		
20	26.22	35.97	23.72	1.5	0.0	1	0.4	0.5
30	26.23	35.99	23.73	1.5		0		
50	26.23	36.00	23.74	1.2		1		
75	26.18	36.01	23.76	0.4		1		
100	26.00	36.00	23.81	0.6		1		
150	23.35	36.57	25.04	0.7		6		
200	21.14	36.82	25.86	0.5		8		
250	19.55	36.72	26.21	0.6		3		
300	17.90	36.47	26.44	0.8		8		
400	15.46	35.94	26.61	1.1		4	0.2	
500	13.30	35.55	26.78	1.4	1.1	22	0.2	
600	10.10	35.21	27.12	1.9	1.5	39	0.5	
700	8.31	35.00	27.25	2.3	1.8	43	0.8	0.1
800	6.85	34.91	27.39	1.0	0.6	14	1.9	0.1
000	5.00	34.89	27.61	2.4		34	3.5	

STATION NO: 4-2A-20

DATE 16 1 1952 (Day Mo. Year) LAT. 22°53' N. LONG. 84°42' W. TIME 0736 GCT

DEPTH 1250 Faths. MAX. SAMPLE DEPTH 1973 Meters WIRE ANGLE 20 °

WEATHER 00 Code SEA 3 Code SWELL 090 ° Direction T. 5 ft. Hgt. 6 sec. Period

CLOUDS -- Type 0 Amount TEMP. 74.0 °F. Dry 66.8 °F. Wet BAR 30.15 in.

REL. HUM. 69 % WIND 090 ° Direction T. 4 Force VIS. 7 Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.96	35.91	.8		0		
23	25.99	35.88	.8		1		
70	25.98	35.91	.4		0		
94	25.74	36.02	.6	0.2	0		
141	22.76	36.74	2.3	0.4	7		
189	20.93	36.67	.9		10		
285	17.86	36.33	2.9		13		
382	15.67	35.99	1.6	1.5	20		
480	13.42	35.61	1.3	1.1	33	0.1	
578	10.57	35.18	1.8		32		
677	8.65	35.05	1.8		37		
776	7.23	35.03	2.8	2.1	41		
974	5.34	34.91	2.8		33		
1273	4.47	34.88	2.3				
1573	4.22	34.87	2.9		21		

STATION NO. 4-2A-20

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.96	35.91	23.75	0.8		0		
10	25.97	35.89	23.73	0.8		0		
20	25.99	35.88	23.72	0.8		1		
30	25.99	35.88	23.72	0.7		1		
50	26.00	35.89	23.73	0.6		0		
75	25.90	35.93	23.79	0.4		0		
100	25.70	36.05	23.94	0.8	0.2	1		
150	22.60	36.74	25.39	2.0	0.4	8		
200	20.65	36.64	25.86	1.1		10		
250	18.80	36.45	26.20	2.2		12		
300	17.45	36.28	26.40	2.7		14		
400	15.38	35.93	26.62	1.5	1.4	22	6.9	
500	12.80	35.50	26.84	1.4		33	0.1	
600	10.07	35.14	27.07	1.8		33		
700	8.25	35.04	27.29	2.0		38		
800	6.92	35.02	27.47	2.8	2.1	40		
1000	5.19	34.90	27.60	2.8		33		
1200	4.59	34.88	27.65	2.4		28		
1500	4.27	34.87	27.68	2.8		22		

STATION NO. 4-2A-21

DATE 16 1 1952 (Day Mo. Year) LAT. 23°32' N. LONG. 84°32' W. TIME 1928 GCT

DEPTH 1500 Faths. MAX. SAMPLE DEPTH 1608 Meters WIRE ANGLE 8 °

WEATHER 01 Code SEA 1 Code SWELL - ° Direction T. - ft. Hgt. - sec. Period

CLOUDS Sc Type 4 Amount TEMP. 75.8°F. Dry 68.2°F. Wet BAR. 30.21 in.

REL. HUM. 68 % WIND 140 ° Direction T. 2 Force VIS. 9 Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.44	35.99	.9	0.0	-	0.4	
25	25.38	35.98	2.1	0.0	0	0.8	
75	25.38	36.10	.1	0.0	1	0.3	
100	25.38	36.06	.1	0.0	0		
150	23.66	36.61	.5	0.1	5	0.4	
198	21.13	36.75	.8	0.2	9		
298	17.52	36.38	2.6		-		
398	15.55	36.00	1.8		19		0.0
499	12.57	35.59	5.9	1.6	27		
700	8.13	35.00	2.7	1.7	41	0.8	
901	5.79	34.90	2.5	1.8	29	0.3	
1104	4.81	34.96	2.1		31		
1306	4.34	34.95	3.6		38		
1608	4.22	35.17	3.6	1.6	36		

STATION NO. 4-2A-21

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.44	35.99	23.97	0.9	0.0		0.4	
10	25.40	35.98	23.98	1.4	0.0		0.6	
20	25.39	35.98	23.98	1.9	0.0		0.7	
30	25.38	35.98	23.99	1.9	0.0	0	0.7	
50	25.38	36.03	24.02	1.1	0.0	1	0.6	
75	25.38	36.10	24.08	0.1	0.0	1	0.3	
100	25.38	36.06	24.05	0.1	0.0	0	0.3	
150	23.66	36.61	24.98	0.5	0.1	5	0.4	
200	21.00	36.75	25.84	0.8	0.2	9		
250	19.00	36.64	26.29	1.7		12		
300	17.50	36.37	26.46	2.6		14		
400	15.35	36.00	26.68	1.9		19		0.0
500	12.38	35.59	26.99	4.7	1.6	27		
600	9.98	35.22	27.15	3.7	1.7	34		
700	8.13	35.00	27.27	2.7	1.7	41	0.8	
800	6.84	34.93	27.41	2.6	1.7	35	0.6	
1000	5.31	34.90	27.58	2.3	1.8	30		
1200	4.54	34.93	27.69	2.9	1.8	35		
1500	4.21	35.00	27.79	3.6	1.6	37		
2000				1.9		36		

STATION NO: 4-2A-22

DATE 17 1 1952 (Day Mo. Year) LAT. 24°08' N. LONG. 84°10' W. TIME 0304 GCT

DEPTH 1610 Faths. MAX. SAMPLE DEPTH 2204 Meters WIRE ANGLE 7 °

WEATHER 02 Code SEA 3 Code SWELL - ° Direction T. - ft. Hgt. - sec. Period

CLOUDS Sc Type 5 Amount TEMP. 75.1 °F. Dry 70.8 °F. Wet BAR. 30.16 in.

REL. HUM. 80 % WIND 180 ° Direction T. 4 Force VIS. 7 Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.65	36.00	.3	0.0	0		0.1
49	26.26	36.25	1.1		0		
98	24.76	35.56	.4	0.1	3		
147	21.99	36.92	.6		7		
196	19.90	36.86	1.1	0.3	9	0.6	
294	15.16	36.18	.4	0.8	24	0.0	
392	12.30	35.63	1.8		26		0.1
487	9.98	35.20			36		
674	6.91	34.94	2.6	1.9	30	1.1	
860	5.44	34.89	2.2		38		
1047	4.62	35.03	1.4	1.4	29	0.3	
1234	4.31	34.99	1.0	1.6	32		
1517	4.20	35.16	2.5	1.5	32	0.0	
1808	4.18	34.97	1.1		34		
2204	4.18	34.97	1.7		29		0.2

STATION NO. 4-2A-22

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.65	36.00	23.60	0.3	0.0	0		0.1
10	26.51	36.06	23.69	0.5	0.0	0		
20	26.42	36.11	23.76	0.6	0.0	0		
30	26.37	36.15	23.81	0.8	0.0	0		
50	26.20	36.27	23.95	1.1	0.1	0		
75	25.75	36.47	24.24	0.8	0.1	2		
100	24.60	36.68	24.75	0.4	0.1	3		
150	21.80	36.92	25.75	0.6	0.2	7		
200	19.60	36.84	26.29	1.1	0.3	10	0.6	
250	17.33	36.59	26.67	0.8	0.6	16	0.3	
300	15.08	36.14	26.85	0.5	0.8	24	0.0	
400	12.10	35.60	27.05	1.8	1.1	27		0.1
500	9.70	35.17	27.16	2.1	1.4	36		
600	8.00	35.00	27.29	2.4	1.7	32		
700	6.71	34.93	27.42	2.6	1.9	31	1.1	
800	5.96	34.89	27.49	2.3	1.7	35	0.9	
1000	4.81	34.92	27.66	1.6	1.5	31	0.4	
1200	4.35	34.98	27.75	1.1	1.6	31	0.2	
1500	4.19	34.97	27.76	2.4	1.5	32	0.0	
2000	4.20	34.97	27.76	1.4		32		0.2

STATION NO: 4-2A-23

DATE 17 1 1952 (Day Mo. Year) LAT. 24°38' N. LONG. 83°51' W. TIME 0941 GCT

DEPTH 320 (Faths.) MAX. SAMPLE DEPTH 543 (Meters) WIRE ANGLE 25 °

WEATHER 00 (Code) SEA 2 (Code) SWELL - (Direction) ° T. - (Hgt.) ft. - (Period) sec.

CLOUDS - (Type) 0 (Amount) TEMP. 74.2 (Dry) °F. 69.5 (Wet) °F. BAR. 30.14 in.

REL. HUM. 80 % WIND 100 (Direction) ° T. 2 (Force) VIS. 7 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.33	35.92	2.1		0	0.9	
22	25.10	36.18	1.8	0.0	0	2.0	
45	23.64	36.17	2.3	0.0	3	0.4	
67	22.53	36.21	1.7	0.0	0		
89	22.36	36.05	1.9	0.0	2		
137	20.26	36.44	1.5		10		
179	17.36	36.04	2.8	0.6	18	0.1	
221	15.37	35.98	6.2	1.0	16		0.3
263	13.66	36.00	2.6	1.1	25	0.9	0.1
309	13.35	35.66	2.4	1.4	25	1.0	0.1
354	11.12	35.24	6.4	1.4	27	36.0	
398	9.68	35.08	8.6	1.7	37	0.6	
443	8.64	35.05	2.9		40		
543	7.42	34.86	2.8	1.9	39	0.9	

STATION NO. 4-2A-23

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.33	35.92	23.96	2.1	0.0	0	0.9	
10	25.25	36.10	24.12	2.1	0.0	0	1.4	
20	25.10	36.18	24.22	2.0	0.0	0	1.9	
30	24.80	36.18	24.31	2.1	0.0	1	1.4	
50	23.42	36.17	24.72	2.2	0.0	3	0.4	
75	22.65	36.25	25.00	1.8	0.0	1	0.3	
100	21.74	36.37	25.35	1.8	0.2	3	0.3	
150	18.90	36.43	26.16	1.9	0.4	12	0.2	
200	16.45	36.00	26.43	4.1	0.8	17	0.1	0.3
250	14.77	35.91	26.74	3.4	1.1	22	1.3	0.2
300	13.55	35.73	26.86	2.4	1.3	25	1.0	0.1
400	9.60	35.08	27.10	3.2	1.7	37	0.6	
500	7.94	34.98	27.29	2.8	1.8	39	0.8	

STATION NO. 4-2A-25

DATE 17 1 1952 (Day Mo. Year) LAT. 24°32' N. LONG. 83°06' W. TIME 1639 GCT

DEPTH 15 Faths. MAX. SAMPLE DEPTH 20 Meters WIRE ANGLE - °

WEATHER 00 (Code) SEA 2 (Code) SWELL - (Direction) ° T. - ft. (Hgt.) - sec. (Period)

CLOUDS Ac Cu (type) 1 (Amount) TEMP. 73.7°F. (Dry) 69.5°F. (Wet) BAR. 30.22 in.

REL. HUM. 82 % WIND 050 (Direction) ° T. 3 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	21.77	36.07	.6		3		
10	21.81	36.12	.7		2		
20	21.73	35.84		0.1	1	0.6	0.1

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot Mg/l
0	21.77	36.07	25.11	0.6		3		
10	21.81	36.12	25.14	0.7		2		
20	21.73	35.84	24.95		0.1	1	0.6	0.1

STATION NO. 4-2A-26

DATE 19 1 1952 (Day Mo. Year) LAT. 24°25' N. LONG. 82°26' W. TIME 1558 GCT

DEPTH 20 Faths. MAX. SAMPLE DEPTH 40 Meters WIRE ANGLE 0 °

WEATHER 00 Code SEA 2 Code SWELL - Direction °T. - Hgt. ft. - Period sec.

CLOUDS - Type 0 Amount TEMP. 73.7°F. Dry 68.9°F. Wet BAR. 30.10 in.

REL. HUM. 78 % WIND 050 Direction ° T. 2 Force VIS. 8 Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	23.58	36.18	.8		3		
10	23.54	36.11	1.1		0		
20	23.36	36.24	.4	0.2	2		
30	22.96	36.13	.7	0.0	1	2.9	0.6
40	22.77	36.17	.4		3		0.6

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	23.58	36.18	24.68	0.8		3		
10	23.54	36.11	24.64	1.1		0		
20	23.36	36.24	24.79	0.4	0.2	2	2.8	
30	22.96	36.13	24.82	0.7	0.0	1	2.9	0.6

STATION NO. 4-2A-27

DATE 19 1 1952 (Day Mo. Year) LAT. 24°14' N. LONG. 82°25' W. TIME 1937 GCT

DEPTH 320 Faths. MAX. SAMPLE DEPTH 520 Meters WIRE ANGLE 0 °

WEATHER 00 (Code) SEA 2 (Code) SWELL - (Direction) °T. - ft. (Hgt.) - sec. (Period)

CLOUDS Sc (Type) 1 (Amount) TEMP. 73.0°F. (Dry) 69.4 °F. (Wet) BAR. 30.11 in.

REL. HUM. 84 % WIND 050 (Direction) ° T. 3 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	23.19	36.15	.3	0.1	18		
25	22.56	36.14	.4		4	0.4	
50	22.58	36.08	.3		2		
75	21.68	36.00	.3	0.0	0		
100	15.89	36.12	1.4	1.3	16		0.2
155	13.22	35.66	1.2	1.2	21	0.6	
205	11.68	35.70	1.9		34		
255	10.84	35.34	1.1		22		0.2
305	10.28	35.25	1.3		29		
360	9.41	35.16	2.3		-		
410	8.66	35.00	2.1	1.5	32	0.4	0.2
460	8.16	34.99		1.8	-		-
510	7.75	34.94	2.0		34		0.1
520	7.68	34.93	2.0	2.6	38		

TATION NO. 4-2A-27

VALUES AT STANDARD DEPTHS

epth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg PO_4-P	NO_3-N	Carb. mg/l	Prot. Mg/l
0	23.19	36.15	24.77	0.3		18		
10	22.80	36.15	24.88	0.3		12		
20	22.58	36.14	24.94	0.4		7	0.4	
30	22.58	36.13	24.93	0.4	0.1	4	0.4	
50	22.58	36.08	24.89	0.3	0.0	2		
75	21.68	36.00	25.09	0.3	0.0	0		
100	15.89	36.12	26.65	1.4	1.3	16		0.2
150	13.38	35.72	26.89	1.2	1.2	21	0.6	
200	11.86	35.49	27.01	1.8	1.3	33		
250	11.00	35.35	27.07	1.2	1.3	23		0.2
300	10.32	35.26	27.12	1.3	1.4	28		
400	8.84	35.01	27.17	2.1	1.5	32	0.4	0.2
500	7.83	34.95	27.28	2.0	2.3	34		0.1

STATION NO. 4-2A-28

DATE 20 1 1952 (Day Mo. Year) LAT. 23°48' N. LONG. 82°20' W. TIME 0030 GCT

DEPTH 780 Faths. MAX. SAMPLE DEPTH 1078 Meters WIRE ANGLE 20 °

WEATHER 00 (Code) SEA 2 (Code) SWELL - (Direction) ° T. - ft. (Hgt) - sec. (Period)

CLOUDS Sc (Type) 1 (Amount) TEMP. 77.2 °F. (Dry) 70.7 °F. (Wet) BAR. 30.12 in.

REL. HUM. 72 % WIND 090 (Direction) ° T. 4 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.12	36.12	.5		1		0.3
22	26.10	35.95	.2	0.0	0	0.6	0.3
49	26.12	36.01	.1	0.0	0	0.3	0.2
70	24.61	36.32	.2		2		
97	22.95	36.31	.2	0.0	0		
149	21.21	37.05	.3	0.2	0	0.4	
192	18.64	36.17	1.0	0.1	3	0.1	
284	15.26	36.02	2.0	0.8	10	0.1	
380	12.28	35.55	1.2		25		
463	9.91	35.40	1.0	1.6	26	0.7	0.1
546	8.44	35.29	2.0		32		
707	6.55	34.86	1.5	1.9	35	1.2	
888	5.37	34.88	2.1		31		0.1
1078	4.81	35.06	1.7		29		0.0

STATION NO. 4-2A-28

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot Mg/l
0	26.12	36.12	23.86	0.5		0		0.3
10	26.08	36.02	23.80	0.4		1		0.3
20	26.07	35.95	23.75	0.2	0.0	0	0.6	0.3
30	26.10	35.96	23.75	0.2	0.0	0	0.5	0.3
50	26.12	36.02	23.79	0.1	0.0	0	0.3	0.2
75	24.15	36.32	24.62	0.2	0.0	2	0.3	
100	22.95	36.30	24.95	0.2	0.0	0	0.4	
150	21.20	36.23	25.39	0.3	0.2	0	0.4	
200	18.38	36.15	26.08	1.1	0.2	4	0.1	
250	16.48	36.07	26.48	1.6	0.5	7	0.1	
300	14.80	35.96	26.77	1.9	0.9	12	0.2	
400	11.95	35.51	27.01	1.2	1.3	25	0.6	
500	9.18	35.35	27.38	1.4	1.6	29	0.8	0.1
600	7.71	35.14	27.45	1.8	1.8	33	1.0	0.1
700	6.60	34.86	27.38	1.5	1.9	35	1.2	
800	5.96	34.85	27.46	1.8		33		
1000	4.99	34.99	27.69	1.9		30	0.1	

STATION NO. 4-2A-29

DATE 20 1 1952 (Day Mo. Year) LAT. 23°33' N. LONG. 82°24' W. TIME 0428 GCT

DEPTH 920 Faths. MAX. SAMPLE DEPTH 1490 Meters WIRE ANGLE 5 °

WEATHER 00 (Code) SEA 2 (Code) SWELL - (Direction) ° T. - (Hgt.) ft. - (Period) se

CLOUDS Sc (Type) 1 (Amount) TEMP. 75.9°F. (Dry) 71.6°F. (Wet) BAR. 30.11 in

REL: HUM. 80 % WIND 090 (Direction) ° T. 3 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C.	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.03	36.12	.5		0		0.4
25	25.89	36.27	.1	0.0	18	3.9	
50	26.07	35.98	.1	0.1	2	0.6	
75	25.98	36.00	.1		0		
99	25.46	36.26	.2	0.0	0	0.6	
149	22.61	36.82	1.5	0.1	-	0.2	
199	20.04	36.77	.4	0.4	7	0.2	0.1
298	17.02	---			2		
396	14.19	35.91	8.7		3		0.1
495	11.42	35.48	1.3	1.4	28	0.0	0.2
693	9.67	36.83	.3	0.2	7	0.0	
892	5.65	34.97	3.7	1.8	34	0.1	
1191	4.58	35.08	1.6	1.5	29	7.7	0.3
1490	4.22	34.97	1.0	1.3	19		0.0

STATION NO. 4-2A-29

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.03	36.12	23.89	0.5		0		0.4
10	25.85	36.21	24.01	0.3		7		
20	25.90	36.26	24.04	0.2	0.0	14		
30	25.90	36.27	24.04	0.1	0.0	15	3.2	
50	26.07	35.98	23.77	0.1	0.1	2	0.6	
75	25.98	36.00	23.81	0.1	0.0	0	0.6	
100	25.20	36.28	24.27	0.2	0.0	0	0.6	
150	22.70	36.82	25.42	1.4	0.1	4	0.2	
200	20.00	36.76	26.12	0.4	0.4	7	0.2	0.1
250	18.30	36.54	26.39	2.6		5	0.2	
300	17.03	36.33	26.54	4.7		2	0.1	
400	13.90	35.85	26.88	8.4		3	0.1	0.1
500	11.39	35.47	27.09	1.2	1.4	27	0.0	0.2
600	10.61	35.30	27.10	0.8	0.8	17	0.0	
700	9.50	35.13	27.16	0.4	0.3	8	0.0	
800	7.20	35.00	27.41	2.0	1.2	22	0.0	
1000	5.20	34.97	27.65	2.9	1.7	33	2.5	
1200	4.59	34.97	27.72	1.6	1.5	29	7.7	0.3
1500	(4.20)	(34.97)	27.76		1.3			0.0

( ) Extrapolated values.

STATION NO. 4-2A-30

DATE 20 1 1952 (Day Mo. Year) LAT. 23°12' N. LONG. 82°22' W. TIME 1025 GCT

DEPTH 550 Faths. MAX. SAMPLE DEPTH 1048 Meters WIRE ANGLE 3

WEATHER 00 (Code) SEA 2 (Code) SWELL - (Direction) ° T. - ft. (Hgt.) - s (Period)

CLOUDS - (Type) 0 (Amount) TEMP. 68.8 °F. (Dry) 66.2 °F. (Wet) BAR. 30.07

REL. HUM. 88 % WIND 140 (Direction) ° T. 1 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot Mg/l
0	25.24	36.13	.6		0		
10	25.26	36.14	.1	0.0	1		0.5
25	25.34	36.08	.3	0.0	2	1.3	0.3
50	25.26	36.08	.9	0.0	0		
75	25.28	36.35	.9		0		
100	25.28	36.32	.4	0.5	0		0.7
150	23.19	36.83	.2	1.3	7		
200	20.84	36.97	2.8	0.3	8		
299	---	36.44	.6	0.5	11		0.1
399	15.22	36.13	1.8	0.7	16		0.4
499	13.03	35.71	1.7	1.1	28	10.5	
598	10.43	35.43	3.3	1.6	25	0.0	
798	7.11	34.97	2.7	2.1	26		0.2
1048	4.92	35.08	2.7		27		0.1

STATION NO. 4-2A-30

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb Mg/l	Prot. Mg/l
0	25.24	36.13	24.14	0.6		0		
10	25.26	36.14	24.14	0.1	0.0	1		0.5
20	25.30	36.09	24.09	0.2	0.0	2		0.3
30	25.39	36.08	24.06	0.4	0.0	2	1.7	0.3
50	25.26	36.08	24.10	0.9	0.0	0	3.1	
75	25.28	36.35	24.30	0.9	0.3	0	4.8	
100	25.28	36.32	24.27	0.4	0.5	0	6.6	0.7
150	23.19	36.83	25.29	0.2	1.3	7	20.8	
200	20.84	36.97	26.06	2.8	0.3	8	6.0	
250	19.21	36.82	26.37	1.7	0.4	10		
300	17.65	36.42	26.46	0.6	0.5	11		0.1
400	15.22	36.12	26.80	1.8	0.7	16		0.4
500	13.03	35.70	26.95	1.7	1.1	28	10.2	
600	10.40	35.42	27.23	3.3	1.6	25	0.0	
700	8.60	35.17	27.33	3.0	1.9	26		
800	7.05	34.97	27.41	2.7	2.1	26		0.2
1000	5.17	35.03	27.70	2.7		27		0.1

STATION NO: 4-2A-31

DATE 22 (Day) 1 (Mo.) 1952 (Year) LAT. 23°15' N. LONG. 83°09' W. TIME 1756 GCT

DEPTH 1150 Faths. MAX. SAMPLE DEPTH 1998 Meters WIRE ANGLE 5 °

WEATHER 00 (Code) SEA 2 (Code) SWELL 160 ° (Direction) T. 3 ft. (Hgt.) 3 sec. (Period)

CLOUDS Sc (Type) 1 (Amount) TEMP. 77.5°F. (Dry) 71.4°F. (Wet) BAR. 30.02 in.

REL. HUM. 75 % WIND 160 ° (Direction) T. 2 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.45	36.13	.8		0		0.2
25	25.29	36.13	.3		2		0.8
50	25.25	36.13	.4	1.0	0	2.5	0.1
75	25.27	36.18	.6	0.1	2		0.0
100	25.12	36.17	.3	0.1	2	0.6	1.8
150	23.59	36.71	.6	0.2	1	0.8	
199	---	36.80	.7		8		0.2
299	17.58	36.85	.9	1.8	10		0.0
399	15.72	36.64	3.5	0.7	19		0.2
598	10.58	35.40	1.7		30		
798	6.88	34.88	2.5		32		0.1
998	5.00	34.92	2.8	1.6	7		
1298	4.33	34.97	1.7		23		0.4
1598	4.19	34.97	3.4	1.4	32		0.3
1998	4.16	36.43	3.9		31		

STATION NO. 4-2A-31

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.45	36.13	24.08	0.8		0		0.2
10	25.40	36.13	24.09	0.6		1		0.4
20	25.30	36.13	24.12	0.4		2		0.7
30	25.26	36.13	24.14	0.3		2		0.7
50	25.25	36.13	24.14	0.4	1.0	0	2.5	0.1
75	25.27	36.18	24.17	0.6	0.1	2	9.1	0.0
100	25.12	36.17	24.21	0.3	0.1	2	0.6	1.8
150	23.59	36.71	25.08	0.6	0.2	1	0.8	
200	20.80	36.80	25.94	0.7	0.7	8		0.2
250	19.00	36.84	26.44	0.8	1.3	9		0.1
300	17.56	36.85	26.81	0.9	1.8	10		0.0
400	15.77	36.64	27.08	3.5	0.7	19	0.0	0.2
500	13.01	36.13	27.28	2.6		25		
600	10.55	35.38	27.17	1.7		30		
700	8.44	35.02	27.24	2.1		31		
800	6.80	34.88	27.37	2.5		32		0.1
1000	4.90	34.92	27.64	2.8	1.6	7		
1200	4.38	34.97	27.74	2.1	1.5	18		0.3
1500	4.20	34.97	27.76	2.8	1.4	29	1.0	0.3
2000	4.15	34.97	27.77	3.9		31		

STATION NO. 4-2A-32

DATE 23 (Day) 1 (Mo.) 1952 (Year) LAT. 23°24' N. LONG. 83°55' W. TIME 0032 GCT

DEPTH 1250 Faths. MAX. SAMPLE DEPTH 2192 Meters WIRE ANGLE 9

WEATHER 00 (Code) SEA 2 (Code) SWELL - (Direction) ° T. - ft. - se

CLOUDS Sc (Type) 1 (Amount) TEMP. 77.0 °F. (Dry) 71.5 °F. (Wet) BAR. 29.97 i

REL. HUM. 77 % WIND 090 (Direction) ° T. 3 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot Mg/l
0	25.55	36.02	1.1	0.1	0		
24	25.58	36.07	2.2	0.0	0	0.2	0.1
49	25.53	37.83	.2	0.0	0	3.3	
98	25.49	37.32	1.4	0.6	2		0.1
148	23.53	36.69	1.1		4		
197	21.31	37.21	1.3		8		0.2
296	17.54	36.34	1.1		11		0.4
394	14.98	35.95	2.7		18		
493	12.53	35.48		1.1	25		
593	10.38	35.21	2.2	1.7	26		
792	7.00	34.88	2.3	2.0	36	1.5	
1092	4.86	34.88	2.1	1.7	31	0.7	
1392	4.29	35.79	2.0	1.2	37		
1692	4.18	34.94	1.5	1.5	30		
2192	4.17	34.93	1.7	1.4	29		

STATION NO. 4-2A-32

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot Mg/l
0	25.55	36.02	23.96	1.1	0.1	0		
10	25.55	36.04	23.98	1.6	0.1	0		
20	25.57	36.06	23.99	2.0	0.0	0		0.1
30	25.55	36.09	24.02	1.7	0.0	0	0.9	0.1
50	25.50	36.18	24.10	0.2	0.0	0	3.3	0.1
75	25.50	36.34	24.22	0.8		1		0.1
100	25.48	36.50	24.35	1.4		2		0.1
150	23.45	36.69	25.10	1.1		4		0.2
200	21.17	36.74	25.79	1.3		8		0.2
250	19.10	36.55	26.20	1.2		10		0.3
300	17.33	36.32	26.46	1.1		11		0.4
400	14.79	35.93	26.75	2.7		18		
500	12.39	35.46	26.89	2.5	1.1	25		
600	10.12	35.19	27.10	2.2	1.7	26		
700	8.30	34.99	27.24	2.3	1.9	31		
800	6.88	34.88	27.36	2.3	2.0	36	1.5	
1000	5.44	34.86	27.53	2.1	1.8	33	1.0	
1200	4.51	34.91	27.68	2.0	1.5	33	5.8	
1500	4.25	34.94	27.73	1.8	1.3	34		
2000	4.18	34.94	27.74	1.6	1.4	29		

STATION NO. 4-2A-33

DATE 23 1 1952 (Day Mo. Year) LAT. 23°32' N. LONG. 84°32' W. TIME 0658 GCT

DEPTH 1570 Faths. MAX. SAMPLE DEPTH 2258 Meters WIRE ANGLE 25

WEATHER 00 Code SEA 3 Code SWELL 180 Direction ° T. 3 Hgt. ft. 3 Period se.

CLOUDS - Type 0 Amount TEMP. 76.6°F. Dry 71.9°F. Wet BAR. 30.00 i.

REL. HUM. 81 % WIND 180 Direction ° T. 3 Force VIS. 8 Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot Mg/l
0	25.95	35.91	.4		1		
67	25.44	36.08	.3	0.0	0	0.7	0.1
135	24.55	36.41	.6	0.1	3	0.2	
181	25.32	36.76	.8	0.2	8		
226	20.28	36.68	.4	0.2	9		
272	18.78	36.56	.4		18		0.3
364	16.40	36.18	1.0	0.7	19	4.4	
409	15.05	35.99	.9		17		0.1
454	13.55	35.68	1.3	2.0	20		0.2
500	12.25	35.50	1.6		30		
545	11.28	35.39	1.6	2.2	31		
636	9.13	35.09	2.2	1.5	34	0.2	0.2
728	7.40	34.91	2.5	2.4	41		
819	6.36	34.86	2.2	1.8	35		
1094	4.86	34.91	2.4	1.6	33		
1564	4.20	34.95	2.0		24		0.2
2258	4.20	34.94	2.0	2.2	19	1.9	

STATION NO. 4-2A-33

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot Mg/l
0	25.95	35.91	23.76	0.4		1		
10	25.92	35.93	23.78	0.4		1		
20	25.86	35.95	23.81	0.4		1		
30	25.74	35.98	23.87	0.4		1		
50	25.57	36.03	23.96	0.3		0		
75	25.45	36.13	24.08	0.3	0.0	0	0.6	0.1
100	25.17	36.23	24.24	0.4	0.0	1	0.5	
150	23.90	36.65	24.94	0.7	0.1	5	0.2	
200	21.30	36.74	25.75	0.6	0.2	8	0.2	
250	19.64	36.63	26.12	0.4	0.3	9	0.9	0.3
300	18.26	36.45	26.33	0.6	0.6	11	2.5	0.2
400	15.22	36.02	26.73	0.9	1.2	17	5.6	0.1
500	12.25	35.50	26.95	1.6	2.1	30	7.2	0.2
600	9.94	35.20	27.14	2.0	1.8	33	2.9	0.2
700	7.85	34.94	27.27	2.4	2.1	38		
800	6.52	34.86	27.39	2.1	1.9	36		
1000	5.30	34.88	27.57	2.3	1.7	34		
1200	4.65	34.94	27.69	2.3	1.7	31		
1500	4.25	34.95	27.74	2.1	1.8	25		0.2
2000	4.22	34.95	27.74	2.0	2.0	21	1.9	

STATION NO. 4-2A-34

DATE 23 1 1952 (Day Mo. Year) LAT. 23°28' N. LONG. 85°17' W. TIME 1353 GCT

DEPTH 1370 Faths. MAX. SAMPLE DEPTH 2389 Meters WIRE ANGLE 6

WEATHER 01 (Code) SEA 2 (Code) SWELL - (Direction) ° T. - (Hgt.) ft. - (Period) se

CLOUDS Cl (Type) 1 (Amount) TEMP. 77.5°F. (Dry) 72.5 °F. (Wet) BAR. 30.10 i

REL. HUM. 79 % WIND 135 (Direction) ° T. 2 (Force) VIS. 9 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	PO_4-P
0	26.49	35.86	0.1
10	26.47	35.78	0.0
25	26.50	35.84	0.0
50	26.46	35.89	0.0
75	26.48	35.84	0.0
148	24.24	36.54	0.1
198	20.38	36.80	0.2
248	19.48	36.56	---
297	18.02	36.40	---
396	14.96	35.87	1.0
446	13.84	35.71	1.0
496	12.55	35.46	1.1
545	11.11	35.37	---
595	10.08	35.19	1.4
694	8.45	35.20	1.7
793	6.93	34.82	1.9
893	6.02	34.93	1.7
1192	5.08	36.45	0.4
1690	4.21	34.93	1.5
2389	4.20	34.90	1.7

TATION NO. 4-2A-34

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	PO_4-P
0	26.49	35.84	23.55	0.1
10	26.47	35.78	23.49	0.0
20	26.50	35.82	23.52	0.0
30	26.47	35.86	23.56	0.0
50	26.46	35.89	23.58	0.0
75	26.48	35.84	23.54	0.0
100	26.30	36.02	23.73	0.0
150	23.97	36.58	24.87	0.1
200	21.37	36.80	25.78	0.2
250	19.43	36.55	26.11	0.4
300	17.80	36.38	26.40	0.7
400	14.90	35.86	26.67	1.0
500	12.46	35.45	26.87	1.1
600	10.02	35.27	27.18	1.4
700	8.36	35.06	27.29	1.7
800	6.88	34.90	27.38	1.9
1000	5.62	34.90	27.54	1.1
1200	4.99	34.92	27.63	0.4
1500	4.38	34.93	27.71	1.1
2000	4.20	34.92	27.72	1.7

STATION NO. 4-2A-34

DATE 23 1 1952 (Day Mo. Year) LAT. 23°28' N. LONG. 85°17' W. TIME 1353 GCT

DEPTH 1370 Faths. MAX. SAMPLE DEPTH 2389 Meters WIRE ANGLE 6 °

WEATHER 01 Code SEA 2 Code SWELL - Direction ° T. - Hgt. ft. - Period sec.

CLOUDS Ci Cu Type 4 Amount TEMP. 77.5 °F. Dry 72.5 °F. Wet BAR. 30.10 in.

REL. HUM. 79 % WIND 135 Direction ° T. 2 Force VIS. 9 Code

OBSERVED VALUES

Depth	Total PO_4-P	Inorg. PO_4-P	Carb. Mg/l	NO_3-N	Prot. Mg/l
0	.5			0	
75	.5	0.0	0.7	3	
148	.9	0.1		4	
198	.9	0.2	0.0	5	0.0
248	.8			12	
297	.8			13	
396	2.3	1.0		26	
446	1.4	1.0		23	
496	1.7	1.1		25	
545	2.1			27	
595	2.6	1.4		36	
694	2.0	1.7	0.4	35	
793	2.2	1.9	4.8	37	
893	3.4	1.7	0.6	32	
1192	.8	0.4		13	
1690	1.9	1.5		32	
2389	2.2	1.7	0.8	34	

STATION NO. 4-2A-34

VALUES AT STANDARD DEPTHS

Depth	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	0.5		0		
10	0.5		0		
20	0.5		1		
30	0.5		1		
50	0.5		2		
75	0.5	0.0	3	0.7	
100	0.6	0.0	3	1.4	0.0
150	0.9	0.1	4	2.8	
200	0.9	0.2	5	0.0	
250	0.8	0.4	12	0.0	
300	0.8	0.6	13	0.1	
400	2.2	1.0	26	0.1	
500	1.7	1.1	25		
600	2.6	1.4	36		
700	2.0	1.7	35	0.4	
800	2.3	1.9	37	4.8	
1000	2.5	1.3	25		
1200	0.8	0.4	13		
1500	1.5	1.1	25		
2000	2.0	1.6	33		

STATION NO. 4-2A-34A

OBSERVED VALUES

Depth	Total PO_4-P	Inorg. PO_4-P	Carb. Mg/l	NO_3-N	Prot. Mg/l
0	.5	0.1		0	
10	.6	0.0	0.0	-	
25	1.8	0.0	1.8	0	
50	.8	0.0		-	
75	3.2	0.0	0.2	0	
100	.4	0.0		0	
150	.4			6	

VALUES AT STANDARD DEPTHS

Depth	Total PO_4-P	Inorg. PO_4-P	Carb. Mg/l	NO_3-N	Prot. Mg/l
0	0.5	0.1		0	
10	0.6	0.0	0.0	0	
20	1.4	0.0	1.2	0	
30	1.6	0.0	1.6	0	
50	0.8	0.0	1.0	0	
75	3.2	0.0	0.2	0	
100	0.4	0.0		0	
150	0.4			6	

STATION NO. 4-2A-35

DATE 23 (Day) 1 (Mo.) 1952 (Year) LAT. 23°30' N. LONG 85°59' W. TIME 2153 GCT

DEPTH 1850 Faths. MAX. SAMPLE DEPTH 457 Meters WIRE ANGLE 39° °

WEATHER 02 Code SEA 2 Code SWELL - Direction ° T. - Hgt. ft. - Period sec.

CLOUDS Ci Cu Type 6 Amount TEMP. 78.5 °F. Dry 72.0 °F. Wet BAR. 30.05 in.

REL. HUM. 73 % WIND 100 Direction ° T. 3 Force VIS. 9 Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.60	35.84	.4	0.1	0		
20	---	35.82	.7	0.1	4		
40	26.40	35.89	.3	0.0	0		
65	---	35.72	.5	1.0	0		
77	25.92	36.19	.5	0.0	5	0.3	
114	---	36.20	1.0	0.2	5		
152	19.80	36.74	.5		8		
188	19.35	36.63	1.1	0.0	9	0.2	
225	18.28	36.49	.7	1.1	12		
261	17.36	36.19	2.8	0.4	13		
294	16.20	35.34	1.0		15		0.2
327	14.82	35.91	1.2	1.1	20		
357	14.06	35.84	1.4	1.0	10		
385	13.27	35.66	1.9	0.9	27	4.0	
411	12.23	35.52	1.6	1.3	24		
457	10.64	35.31	2.0	2.2	38		
543	8.88	35.34	2.2	1.6	34	0.0	
711	7.46	34.96	2.1	1.7	39		0.4
921	5.66	34.95	2.2	1.6	36	5.7	
1295	4.35	34.99	2.1	1.4	31		

STATION NO: 4-2A-35

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Pr Mg
0	26.60	35.84	23.50	0.4	0.1	0		
10	26.58	35.83	23.50	0.6	0.1	2		
20	26.50	35.82	23.52	0.7	0.1	4	0.1	
30	26.45	35.85	23.55	0.5	0.1	2	0.4	
50	26.30	35.87	23.62	0.4	0.4	0	1.0	
75	25.90	35.90	23.76	0.5	0.2	4	0.3	
100	25.08	36.20	24.24	0.8	0.1	5	0.3	
150	21.23	36.74	25.77	0.5	0.1	8	0.2	
200	19.05	36.59	26.24	1.0	0.4	10	1.3	
250	17.68	36.30	26.36	2.2	0.6	13	3.4	
300	15.92	36.00	26.55	1.0	0.8	16	3.6	
400	12.75	35.59	26.92	1.7	1.1	25	3.5	
500	9.83	35.22	27.17	2.1	1.9	36	1.1	
600	8.37	35.07	27.29	2.2	1.6	36	0.6	
700	7.54	34.96	27.33	2.1	1.7	39	1.7	
800	6.68	34.95	27.44	2.1	1.7	38	3.5	
1000	5.23	34.95	27.63	2.2	1.6	35		
1200	4.53	34.96	27.72	2.1	1.5	32		

STATION NO. 4-2A-36

DATE 24 1 1952 (Day Mo. Year) LAT. 23°28' N. LONG. 86°43' W. TIME 0611 GCT

DEPTH 590 Faths. MAX. SAMPLE DEPTH 1035 Meters WIRE ANGLE 15 °

WEATHER 00 Code SEA 2 Code SWELL - Direction ° T. - Hgt. ft. - Period sec.

CLOUDS - Type 0 Amount TEMP. 78.5°F. Dry 72.5°F. Wet BAR. 30.15 in.

REL. HUM. 75 % WIND 080 Direction ° T. 2 Force VIS. 8 Code

OBSERVED VALUES

Depth	Temp. ° C.	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.44	35.96	.5		0		
10	---	35.95	.3	0.0	3	0.5	
24	24.09	36.23	.4		2		
48	21.68	36.48	.6	0.2	7		
72	18.64	36.48	.7		10		
96	17.32	36.35	1.1	0.5	14		
144	15.56	36.11	1.6		22		
192	13.99	35.73	1.3	1.0	11		
241	12.45	35.70	1.6		8		
290	10.49	35.45	2.5	1.6	35	0.6	
339	9.33	35.08	2.1	1.8	10	0.2	
388	7.84	35.02	2.2	2.6	9		0.6
487	7.14	35.16	1.9		35		
586	6.32	35.28	1.9	1.8	40		
786	5.30	34.93	1.7	1.6	35		
1035	4.26	35.03	2.7		34		

STATION NO. 4-2A-36

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	P M/
0	24.44	35.96	24.26	0.5		0		
10	24.33	35.95	24.28	0.3	0.0	3	0.5	
20	24.15	36.10	24.45	0.4	0.1	2		
30	23.85	36.37	24.74	0.5	0.1	3		
50	20.25	36.48	25.84	0.6	0.2	7		
75	18.45	36.48	26.31	0.8	0.4	11		
100	17.00	36.33	26.55	1.1	0.5	15		
150	15.40	36.07	26.72	1.6	0.8	21		
200	13.80	35.66	26.76	1.3	1.0	10	12.0	
250	12.15	35.36	26.86	1.8	1.4	13		
300	10.23	35.19	27.08	2.4	1.6	30	0.5	
400	8.28	35.01	27.26	2.2	2.6	12		
500	7.00	34.98	27.42	1.9	2.2	36		
600	6.22	34.96	27.51	1.9	1.8	40	2.7	
700	5.71	34.94	27.56	1.8	1.7	37		
800	5.23	34.93	27.61	1.8		35		
1000	4.39	35.00	27.77	2.6				

STATION NO. 4-2A-37

DATE 24 1 1952 LAT. 24°31' N. LONG. 85°54' W. TIME 1826 GCT
(Day Mo. Year)

DEPTH 1850 Faths. MAX. SAMPLE DEPTH 2362 Meters WIRE ANGLE 20 °

WEATHER 02 (Code) SEA - (Code) SWELL - (Direction) ° T. - (Hgt.) ft. - (Period) sec.

CLOUDS Cu (Type) 5 (Amount) TEMP. 73.3 (Dry) °F. 70.2 (Wet) °F. BAR. 30.17 in.

REL. HUM. 86 % WIND 045 (Direction) ° T. 5 (Force) VIS. 9 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.00	34.36	.4	0.0	0		
23	23.04	36.44	.3	0.0	0	0.0	
46	22.21	36.18	.5	0.0	0	0.8	
70	20.45	36.55	.7		10		
94	18.20	36.35	1.2	0.8	17		
141	15.96	36.29	1.1		17		
188	14.54	36.04	1.1	0.9	25	1.5	
236	12.72	36.09	1.6	1.2	27		
284	23.61	35.33	.6	0.0	4		
332	10.66	35.16	1.7		36		
380	9.83	35.01	1.7		31		
478	8.23	34.94	1.7	1.8	38		0.0
575	7.05	35.66	1.9	2.0	17		
870	5.08	34.95	1.9	1.9	20		
1166	4.36	34.99	1.6	1.5	27		0.4
1664	4.18	35.01	1.6	1.9	-	0.4	
2362	4.20	34.95	2.5	1.3	24	0.2	

STATION NO. 4-2A-37

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.00	34.36	22.57	0.4	0.0	0		
10	25.50	35.70	23.74	0.4	0.0	0		
20	23.70	36.35	24.77	0.3	0.0	0	0.0	
30	22.90	36.46	25.09	0.4	0.0	0	0.2	
50	21.90	36.53	25.43	0.5	0.1	2	0.8	
75	20.01	36.55	25.96	0.8	0.5	11	1.0	
100	18.00	36.34	26.32	1.2	0.8	17	1.1	
150	15.75	36.28	26.81	1.1	0.9	19	1.3	
200	13.85	35.90	26.93	1.2	1.0	26		
250	12.37	35.53	26.95	1.3	0.8	20		
300	11.38	35.28	26.94	1.0	0.1	15		
400	9.50	34.98	27.04	1.7	1.1	32		
500	7.97	34.94	27.25	1.7	1.8	32		0.0
600	6.84	34.94	27.41	1.9	2.0	12		
700	6.11	34.94	27.51	1.9	2.0	15		
800	5.44	34.94	27.60	1.9	1.9	19		
1000	4.68	34.97	27.71	1.8	1.7	23		
1200	4.28	34.99	27.77	1.6	1.5	27		0.4
1500	4.18	35.01	27.80	1.6	1.8	26	0.4	
2000	4.18	34.99	27.78	2.0	1.6	25		

STATION NO. 4-2A-38

DATE 25 1 1952 (Day Mo. Year) LAT. 25°00' N. LONG. 86°00' W. TIME 0112 GCT

DEPTH 1820 Faths. MAX. SAMPLE DEPTH 1038 Meters WIRE ANGLE 45 °

WEATHER - Code SEA - Code SWELL - Direction ° T. - Hgt. ft. - Period sec.

CLOUDS Sc Type 4 Amount TEMP. 71.3°F. Dry 68.6°F. Wet BAR. 30.22 in.

REL. HUM. 88 % WIND 090 Direction ° T. 5 Force VIS. 9 Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	23.22	36.41	.6	-	0		
18	23.22	36.25	.6	0.3	0	0.0	
36	23.03	36.32	.4	0.1	0	2.8	
53	22.43	36.44	1.1	1.0	0		
70	21.78	36.45	.7	0.1	5		
104	18.57	36.18	1.1	0.5	5	1.3	
139	16.54	36.03	1.0	0.9	18		0.4
173	15.36	35.71	1.1		12		0.0
208	13.83	36.42	1.7	1.0	23		
241	12.52	35.57	1.4	1.0	25		0.1
274	11.60	35.39		1.1	26	2.2	
337	9.52	35.10	1.6	1.6	33	1.9	
395	8.22	35.01	4.3	1.7	42	1.2	0.4
568	6.50	35.08	2.1	1.8	37	1.0	
741	---	36.21	1.3	1.9	15	1.7	
1038	5.30	34.89	1.8	0.7	37		

STATION NO: 4-2A-38

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	23.22	36.41	24.96	0.6		0		
10	23.22	36.31	24.88	0.6		0		
20	23.20	36.25	24.84	0.6	0.3	0	0.3	
30	23.14	36.21	24.83	0.5	0.1	0	1.9	
50	22.80	36.43	25.09	1.0	0.8	0	2.6	
75	21.15	36.45	25.57	0.8	0.2	5	1.9	
100	19.00	36.30	26.03	1.1	0.4	5	1.3	
150	16.25	35.90	26.40	1.1	0.9	16	1.5	0.3
200	14.25	35.64	26.65	1.6	1.0	21	1.8	
250	12.49	35.55	26.94	1.4	1.0	25	2.1	0.1
300	10.87	35.21	26.98	1.5	1.3	29	2.1	0.3
400	8.21	35.01	27.27	4.2	1.7	42	1.2	0.4
500	7.11	34.96	27.39	3.0	1.8	39	1.1	
600	6.32	34.93	27.48	2.0	1.8	33	1.2	
700	6.03	34.91	27.50	1.5	1.9	20	1.5	
800	5.72	34.90	27.53	1.4	1.7	20		
1000	5.35	34.89	27.57	1.7	0.9	34		

STATION NO. 4-2A-39

DATE 25 1 1952 (Day Mo. Year) LAT. 25°35' N. LONG. 86°13' W. TIME 0927 GCT

DEPTH 1750 Faths. MAX. SAMPLE DEPTH 589 Meters WIRE ANGLE 60 °

WEATHER 01 Code SEA 4 Code SWELL - ° Direction T. - ft. Hgt. - sec. Period

CLOUDS Sc Type 3 Amount TEMP. 74.0 °F. Dry 70.1 °F. Wet BAR. 30.20 in.

REL. HUM. 82 % WIND 140 ° Direction T. 4 Force VIS. 8 Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.32	35.95	.7	0.0	0		
18	24.37	35.97	.3	0.0	0		
37	25.32	36.13	.3	0.0	2	0.4	
72	25.15	36.08	1.2	0.0	0		
138	23.26	36.67	.8		7		0.2
198	20.64	36.74	.8	0.3	10		
257	18.12	36.43	1.0	0.4	0	5.6	0.3
319	15.04	35.94	1.2	0.8	18	2.0	0.7
358	14.72	35.91	1.0	0.9	13		
406	13.18	35.70	1.9	1.2	23	0.8	
451	10.84	35.30	2.1	1.5	31		
488	9.37	36.04	3.7	0.3	4	0.6	
589	8.94	35.17	2.1	1.7	27	0.4	0.2

STATION NO. 4-2A-39

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Pro. Mg/
0	25.32	35.95	23.98	0.7	0.0	0		
10	25.31	35.96	23.99	0.5	0.0	0		
20	25.31	35.97	24.00	0.3	0.0	0		
30	25.30	36.05	24.06	0.3	0.0	1	0.4	
50	25.28	36.12	24.12	0.6	0.0	1		
75	25.14	36.08	24.13	1.2	0.0	0		
100	24.60	36.81	24.85	1.1	0.1	3		
150	22.95	36.67	25.23	0.8	0.2	6		0.
200	20.65	36.74	25.93	0.8	0.3	10		0.
250	18.50	36.51	26.32	1.0	0.4	1	5.6	0.
300	15.50	36.02	26.66	1.1	0.7	13	3.1	0.
400	13.38	35.76	26.92	1.8	1.2	22	0.8	
500	9.25	35.24	27.28	3.5	0.5	6	0.6	

STATION NO. 4-2A-40

DATE 25 1 1952 (Day Mo. Year) LAT. 26°05' N. LONG. 86°05' W. TIME 1906 GCT

DEPTH 1700 Faths. MAX. SAMPLE DEPTH 2575 Meters WIRE ANGLE 15 °

WEATHER 02 Code SEA 4 Code SWELL - ° Direction T. - ft. Hgt. - sec. Period

CLOUDS Sc Type 6 Amount TEMP. 75.8 °F. Dry 70.6 °F. Wet BAR. 30.18 in.

REL. HUM. 78 % WIND 100 ° Direction T. 4 Force VIS. 9 Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.10	36.10	.6	0.2	7	2.9	
25	25.03	36.14	.3	0.0	0	0.2	
49	--	36.11	.2	0.0	0		
73	25.04	36.09	.5		1		0.0
98	25.05	36.65	.2	0.0	2	0.9	0.2
146	23.83	36.27	1.0	0.9	5	0.0	0.0
194	21.49	36.40		0.1	3	0.4	
243	19.54	36.37	.5	0.2	10	1.2	
292	18.24	36.40	.6	0.4	12	1.8	
341	17.02	36.09	1.0	0.6	13		
390	15.90	35.87	.9	0.6	19		
440	14.60	35.60	1.4	1.1	16		0.1
489	13.30	34.79	1.4	1.0	10		
586	11.10	34.79	1.7	1.5	28		0.3
872	6.42	34.91	.8	1.9	33		
1278	17.48	36.27	1.1	0.5	13	0.2	
1775	4.25	35.11	1.9	1.4	32		
2575	4.22	34.98	2.0	1.4	28		0.2

STATION NO. 4-2A-40

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	P M
0	25.10	36.10	24.16	0.6	0.2	7	2.9	
10	25.10	36.12	24.18	0.5	0.1	4	1.8	
20	25.08	36.14	24.20	0.4	0.0	1	0.7	
30	25.05	36.13	24.20	0.3	0.0	0	0.2	
50	25.03	36.10	24.18	0.4	0.0	0		
75	25.03	36.09	24.18	0.5	0.0	1		
100	25.04	36.65	24.60	0.2	0.0	2	0.9	
150	23.50	36.28	24.78	1.0	0.8	5	0.0	
200	21.00	36.40	25.58	0.8	0.1	4	0.4	
250	19.35	36.37	25.99	0.5	0.2	10	1.3	
300	18.14	36.39	26.32	0.7	0.4	12	1.8	
400	15.65	35.84	26.49	1.0	0.7	18	0.2	
500	13.13	35.20	26.54	1.4	1.1	12	1.2	
600	10.88	34.96	26.79	1.7	1.5	28	0.5	
700	9.22	34.92	27.04	1.3	1.7	30		
800	7.47	34.91	27.30	1.0	1.8	32		
1000	5.65	34.92	27.55	0.9	1.4	27		
1200	4.89	34.95	27.67	1.0	0.8	17	0.2	
1500	4.33	34.98	27.76	1.5	0.9	21		
2000	4.23	34.98	27.77	1.9	1.4	31		
2500	4.22	34.98	27.77	2.0	1.4	28	0.5	

STATION NO. 4-2A-41

DATE 26 (Day) 1 (Mo.) 1952 (Year) LAT. 27°00' N. LONG. 85°57' W. TIME 0428 GCT

DEPTH 1700 Faths. MAX. SAMPLE DEPTH 2195 Meters WIRE ANGLE 25 °

WEATHER 01 (Code) SEA 3 (Code) SWELL - (Direction) ° T. - (Hgt.) ft. - (Period) sec.

CLOUDS St (Type) 3 (Amount) TEMP. 75.0°F. (Dry) 70.6°F. (Wet) BAR. 30.20 in.

REL. HUM. 80 % WIND 110 (Direction) ° T. 3 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.10	36.07	.6	0.1	0		
23	25.07	36.05	1.2	0.1	6	1.9	
45	---	36.04	1.4	0.1	1	1.8	0.8
68	24.37	36.27	2.2	0.0	0		
90	24.03	36.43	1.0	0.0	3		
135	22.55	36.78	3.1	0.2	6	2.4	
180	20.64	36.68	3.4	0.3	9		0.3
224	17.37	36.21	3.3	0.7	15		
268	15.72	36.05	4.1	0.9	16	0.0	0.0
311	14.13	35.81	3.9	1.0	25	0.7	
354	12.80	36.48	3.8	0.0	0		
395	---	36.07	3.2	0.8	26		
436	10.90	35.45	4.3	1.5	24	0.4	
516	9.32	35.16	3.2	1.6	35		
760	6.34	34.97	2.5	1.7	33		
1084	5.11	34.94	2.9	1.6	33	0.0	
1490	4.22	35.02	2.1	1.4	25		
2195	4.19	35.02	5.8	1.3	34		

STATION NO. 4-2A-41

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot Mg/l
0	25.10	36.07	24.14	0.6	0.1	0		
10	25.09	36.06	24.13	0.9	0.1	2		
20	25.08	36.05	24.13	1.1	0.1	5		
30	25.02	36.04	24.14	1.3	0.1	4	1.9	
50	24.90	36.05	24.19	1.6	0.1	1	1.8	0.(
75	24.25	36.37	24.62	1.8	0.0	1		
100	23.90	36.60	24.90	1.5	0.0	4		
150	22.25	36.77	25.51	3.2	0.2	7	2.1	
200	18.95	36.53	26.22	3.4	0.5	12	1.2	0.2
250	16.33	36.11	26.54	3.7	0.8	16	0.3	0.1
300	14.62	35.88	26.75	3.9	1.0	23	0.5	
400	11.65	35.55	27.10	3.3	0.9	26	0.4	
500	9.66	35.20	27.19	3.4	1.6	33		
600	8.18	35.05	27.31	3.0	1.6	34		
700	6.92	34.99	27.44	2.7	1.7	33		
800	6.08	34.96	27.53	2.6	1.7	33		
1000	5.06	34.95	27.65	2.8	1.6	33	0.0	
1200	4.52	34.97	27.73	2.7	1.5	31		
1500	4.23	35.02	27.80	2.2	1.4	25		
2000	4.20	35.03	27.81	4.8	1.3	32		

STATION NO. 4-2A-42A*

DATE 26 1 1952 (Day Mo. Year) LAT. 27°35" N. LONG. 85°46' W. TIME 1408 GCT

DEPTH 1775 Faths. MAX. SAMPLE DEPTH 2158 Meters WIRE ANGLE 5 °

WEATHER 00 Code SEA 2 Code SWELL - Direction ° T. - Hgt. ft. - Period sec.

CLOUDS Sc Type 1 Amount TEMP. 73.3 °F. Dry 69.3 °F. Wet BAR. 30.20 in.

REL. HUM. 82 % WIND 180 Direction ° T. 3 Force VIS. 8 Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰
0	23.05	36.46
10	23.05	36.25
40	22.82	36.49
75	20.97	36.71
100	18.61	36.01
150	15.90	36.13
200	13.98	35.84
250	12.60	35.59
300	11.22	35.43
400	13.73	36.51
450	8.54	35.08
500	7.69	35.05
700	5.87	35.07
900	4.99	34.95
1200	4.33	34.98
1471	4.80	35.01
2158	4.20	35.30

* See note on Station 4-2A-42.

STATION NO. 4-2A-42 *

OBSERVED VALUES

Depth	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	3.2	0.1	1		
23	3.3	0.1	0	0.0	
47	.8	0.1	0		
71	1.4	0.2	36		
96	2.1	0.4	12		0.2
143	1.9	1.0	19		
189	.9	0.1	1	0.6	
234	1.4	0.4	10		0.5
278	.4	0.7	12		
321	.9	0.9	22		
364	2.3	1.1	21		0.3
405	6.4	0.1	0	0.2	
446		1.2	20		
526	7.5	1.5	20	0.8	
761	3.4	1.8	36		
1076	2.9	1.4	9	3.6	
1471	.3	2.3	18		0.3
2158		1.4	31	0.7	

*There were two casts made at this station, the first including all depths except 47, 1471, and 2158 meters. In this tabulation the values for the latter depths are included in series, and corrected depths are used. This is the same station as Station 42A which is included in the previous table as it appears in the Texas A. and M. reports.

STATION NO. 4-2A-42

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	23.05	36.46	25.05	3.2	0.1	1		
10	23.05	36.25	24.89	3.2	0.1	1		
20	22.95	36.26	24.92	3.3	0.1	0		
30	22.88	36.38	25.03	3.0	0.1	0	0.0	
50	22.74	36.56	25.21	2.2	0.1	5	0.1	
75	20.97	36.71	25.82	1.5	0.2	32	0.2	
100	18.79	36.61	26.32	2.1	0.5	13	0.3	0.2
150	15.90	36.13	26.66	1.7	0.9	16	0.4	
200	13.98	35.84	26.86	1.0	0.2	3	0.6	
250	12.60	35.59	26.95	1.0	0.5	11	0.5	0.5
300	11.22	35.43	27.09	0.6	0.8	17	0.4	0.4
400	9.37	35.18	27.22	5.9	0.2	3	0.2	0.3
500	7.69	35.05	27.38	7.3	1.4	20	0.8	
600	6.58	34.98	27.48	6.2	1.6	25		
700	5.87	34.94	27.54	4.5	1.7	32		
800	5.38	34.94	27.60	3.3	1.7	33		
1000	4.70	34.96	27.70	3.0	1.5	16	3.6	
1200	4.33	34.98	27.76	2.5	1.7	12		
1500	4.20	35.01	27.79	1.5	2.3	19		0.3
2000	4.20	35.03	27.81		1.5	28	0.7	

STATION NO. 4-2A-43

DATE 26 1 1952 (Day Mo. Year) LAT. 28°10' N. LONG. 86°00' W. TIME 2049 GCT

DEPTH 375 Faths. MAX. SAMPLE DEPTH 595 Meters WIRE ANGLE 10 °

WEATHER 00 (Code) SEA 3 (Code) SWELL - (Direction) ° T. - (Hgt.) ft. - (Period) sec

CLOUDS Cu (Type) 4 (Amount) TEMP. 74.5°F. (Dry) 71.4°F. (Wet) BAR. 30.12 in

REL. HUM. 86 % WIND 135 (Direction) ° T. 4 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	22.88	36.35	1.2	0.4	11		
10	22.82	36.07	1.2	0.6	15		
25	22.79	36.40	6.3				0.0
50	22.77	36.42	1.1				
75	21.07	36.15	1.4				
99	19.70	36.48	1.3				
124	17.86	36.31	1.9	0.8			
148	15.98	36.04	.1	1.9	16	0.2	
198	14.40	35.99	.7		10		0.4
247	---	36.36	3.0		3		
296	11.08	35.37	2.6	1.5	2		
396	8.88	35.06	3.7	1.8	37		
496	7.54	34.96	3.9	1.9	26		
595	6.25	34.81	3.9	2.0	35		

STATION NO. 4-2A-43

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	22.88	36.35	25.01	1.2	0.4			
10	22.82	36.07	24.82	1.2	0.6	0		
20	22.78	36.35	25.04	4.5		0		0.0
30	22.78	36.41	25.09	5.2		1		0.0
50	22.77	36.42	25.10	1.1		4		
75	21.07	36.51	25.64	1.4		4		
100	19.70	36.48	25.99	1.3		11		
150	16.00	36.04	26.56	0.1	1.9	16		
200	14.38	35.99	26.89	0.8	1.8	10		0.4
250	12.67	35.76	27.07	3.0	1.6	3		
300	11.02	35.35	27.06	2.6	1.5	4		
400	8.85	35.05	27.20	3.7	1.8	37		
500	7.47	34.95	27.33	3.9	1.9	26		
600				3.9	2.0			

STATION NO. 4-2A-44

DATE 27 1 1952 (Day Mo. Year) LAT. 28°10' N. LONG. 86°45' W. TIME 0359 GCT

DEPTH 1000 Faths. MAX. SAMPLE DEPTH 1836 Meters WIRE ANGLE 22

WEATHER 01 (Code) SEA - (Code) SWELL - (Direction) ° T. - ft. (Hgt.) - sec (Period)

CLOUDS Sc (Type) 3 (Amount) TEMP. 73.7°F. (Dry) 70.8°F. (Wet) BAR. 30.11 in

REL. HUM. 86 % WIND 140 (Direction) ° T. 3 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	23.00	36.38	1.2	0.0	0		
23	22.89	36.34	3.6	0.0	1		0.2
47	22.52	36.36	2.0	0.0	1	2.7	
70	22.19	36.36	3.5	1.3	3		
93	20.18	36.44	1.2	0.3	9		0.1
163	16.37	36.16	1.8		14		0.2
232	13.81	35.73	1.8	0.9	20		0.5
302	11.79	35.42	3.0	1.4	26		
372	10.01	35.19	2.1	1.6	30		0.0
442	8.91	35.23	1.2	1.7	31	0.2	
513	8.28	35.26	1.3	1.9	33	0.9	
655	6.29	34.94	1.7		36		
943	5.01	35.06	1.6	1.7	32		0.0
1234	4.32	35.13		1.5	26	2.6	
1537	5.41	35.19		0.1	2	1.9	1.4
1836	4.20	36.60		1.5	24	1.5	0.4

STATION NO. 4-2A-44

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	23.00	36.38	25.00	1.2	0.0	0		
10	22.95	36.36	25.00	2.2	0.0	0		
20	22.90	36.34	25.00	3.3	0.0	1		0.2
30	22.80	36.34	25.03	3.1	0.0	1		0.2
50	22.50	36.36	25.13	2.1	0.2	1	2.7	
75	21.95	36.36	25.28	2.9	1.1	4		
100	19.75	36.44	25.94	1.3	0.3	9		0.1
150	17.00	36.36	26.57	1.7	0.5	13		0.2
200	15.00	35.90	26.68	1.8	0.8	17		0.4
250	13.32	35.65	26.85	2.1	1.0	22		
300	11.85	35.45	26.99	3.0	1.4	26		
400	9.56	35.13	27.15	1.7	1.6	30		0.0
500	8.47	35.02	27.24	1.3	1.9	33	0.8	
600	7.00	34.95	27.40	1.5	1.9	35		
700	6.00	34.94	27.53	1.7	1.8	35		
800	5.55	34.95	27.59	1.6	1.8	34		
1000	4.78	34.99	27.71		1.7	31		0.0
1200	4.31	---	---		1.5	27		
1500	4.30	---	---		0.3	5	2.0	1.4

STATION NO. 4-2A-45

DATE 27 1 1952 (Day Mo. Year) LAT. 28°02' N. LONG. 87°29' W. TIME 1114 GCT

DEPTH 1490 Faths. MAX. SAMPLE DEPTH 2442 Meters WIRE ANGLE 14

WEATHER 00 (Code) SEA 2 (Code) SWELL 120 (Direction) ° T. 3 (Hgt.) ft. 6 (Period) se

CLOUDS Cu (Type) 1 (Amount) TEMP. 73.2 (Dry) °F. 70.7 (Wet) °F. BAR. 30.00

REL. HUM. 88 % WIND 180 (Direction) ° T. 2 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Pro Mg/
0	22.50	36.15		0.2	0		
10	---	36.13	0.7	0.0	4		
24	22.47	36.15	1.0	0.1	2		
48	22.79	36.71	1.0	0.1	2		
72	20.78	35.86	0.6	0.0	4	1.3	
96	21.01	36.64	0.9	0.3	6	1.1	0.
144	16.92	36.41	1.0	0.6	17	0.0	
215	13.64	35.90	1.6	1.1	20	0.7	0.
286	11.50	35.96	1.1	1.2	24		
357	10.02	35.43	1.3	1.4	29	1.5	
427	---	36.30	1.2	0.6	18	1.1	
496	13.88	35.72	1.4	1.1	22	1.2	0.
565	10.53	35.41	1.4	1.5	33	0.0	
634	9.31	35.08	1.4	1.8	34		
794	6.36	34.88	1.3	1.9	34		
1158	4.46	34.94	2.7	1.4	35	0.3	
1666	4.19	35.10	2.0	1.5	27	0.6	
2442	4.21	35.10	2.0		27		0.

TATION NO. 4-2A-45

VALUES AT STANDARD DEPTHS

epth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot Mg/l
0	22.50	36.15	24.97	-	0.2	0		
10	22.40	36.13	24.98	.7	0.0	4		
20	22.45	36.16	24.99	.9	0.1	3		
30	22.70	36.38	25.09	1.0	0.1	2		
50	22.40	36.71	25.42	1.0	0.1	2	1.9	
75	20.86	36.68	25.83	.7	0:0	4	1.3	
100	20.00	36.63	26.02	.9	0.3	7	1.0	0.2
150	16.70	36.38	26.66	1.0	0.6	17	0.1	
200	14.25	36.00	26.92	1.5	1.0	19	0.6	
250	12.45	35.70	27.06	1.4	1.1	22	3.4	0.5
300	11.11	35.52	27.18	1.1	1.2	25	5.3	
400	9.40	35.15	27.19	1.2	0.9	22	1.3	
500	7.99	34.97	27.27	1.4	1.1	23	1.1	0.1
600	6.65	34.89	27.40	1.4	1.7	34		
700	5.85	34.88	27.50	1.4	1.8	34		
800	5.32	34.88	27.56	1.3	1.9	34		
000	4.70	34.90	27.65	2.1	1.6	35		
200	4.40	34.95	27.73	2.7	1.4	34	0.3	
500	4.21	35.06	27.83	2.2	1.5	30	0.5	
000	4.19	35.11	27.87	2.0		27		

STATION NO. 4-2A-46

DATE 27 1 1952 (Day Mo. Year) LAT. 27°58' N. LONG. 88°15' W. TIME 1828 GCT

DEPTH 1300 Faths. MAX. SAMPLE DEPTH 2148 Meters WIRE ANGLE 22

WEATHER 01 (Code) SEA 4 (Code) SWELL - (Direction) ° T. 8 (Hgt.) .ft. 5 (Period) s

CLOUDS Cu (Type) 2 (Amount) TEMP. 78.2 °F. (Dry) 74.1 °F. (Wet) BAR. 29.97

REL. HUM. 83 % WIND 180 (Direction) ° T. 4 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Pro Mg/
0	23.52	36.35	0.9	0.1	1		0.
9	23.48	36.36	0.5	0.1	2		0.
23	--	36.43	0.5	0.0	0	1.8	
46	22.57	36.26			3		0.
69	22.58	36.51	0.6	0.1	2	0.0	
92	22.56	37.03	1.0		1		0.
137	21.67	36.22	1.4	0.2	7		0.
205	17.25	36.17	1.9	0.6	14		0.
273	14.30	35.52	2.0	1.1	20		
340	12.10	35.68	1.2	1.4	23	3.0	
408	23.15	35.34	1.6	0.0	20	2.7	0.
476	13.79	35.30	1.3	1.3	7	0.3	1.
544	7.72	35.13	1.1	1.4	-		
611	6.98	35.01	1.3	1.8	34		
770	5.74	36.52	1.5	1.8	38		
1135	4.53	36.64	1.7	1.5	33	0.6	
1510	6.71	---	1.1	0.3	11	0.6	
2148	4.18	35.25	1.3	1.5	33	2.8	

STATION NO. 4-2A-46

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	23.52	36.35	24.82	0.9	0.1	1	6.6	0.2
10	23.30	36.37	24.90	0.5	0.1	2	4.5	0.1
20	22.90	36.41	25.05	0.5	0.0	0	2.4	0.2
30	22.65	36.45	25.15	0.5	0.0	1	1.5	0.2
50	22.60	36.48	25.19	0.6	0.1	3	0.7	0.3
75	22.60	36.51	25.21	0.7	0.1	2	0.2	
100	22.50	36.42	35.17	1.1	0.1	2	0.9	0.2
150	20.95	36.22	25.45	1.5	0.3	8	2.0	0.0
200	17.65	36.18	26.28	1.9	0.6	13		0.3
250	15.13	36.06	26.78	2.0	0.9	18		
300	13.35	35.85	27.00	1.7	1.2	21	2.8	
400	10.50	35.38	27.18	1.5	0.2	20	2.8	0.1
500	8.45	35.24	27.41	1.2	1.3	12		1.0
600	7.13	35.03	27.44	1.2	1.7	32		
700	6.22	(34.94)	27.50	1.4	1.8	36		
800	5.53	(34.94)	27.59	1.5	1.8	38		
1000	4.87	(34.99)	27.70	1.6	1.6	35		
1200	4.48	--	--	1.6	1.3	29	0.6	
1500	4.41	--	--	1.1	0.3	12	0.6	
2000	4.30	--	--	1.3	1.2	28	2.3	

Extrapolated values.

Figure 19.--Locations of stations occupied on Cruise 5-2C.

STATION NO. 5-2C-1

DATE 22 5 1952 LAT. 28° 24' N. LONG. 89° 42' W.
Day Month Year

TIME 0642 DEPTH 400 MAX. SAMPLE DEPTH - WIRE ANGLE 25°
GCT Faths. Meters

WATER COLOR 00 WEATHER 01 SEA 1 SWELL - ° T. - °F.
Code Code Code Direction Hgt.

- sec. CLOUDS - 0 TEMP. 75.4 °F. 73.9 °F.
Period Type Amount Dry Wet

BAR. 29.98 in. REL. HUM. 96 % WIND 140 ° T. 2 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	23.82	30.52	1.4	0.5	1	1.0	0.7
8	23.82	*36.34	1.8	0.5	2	1.5	0.2
22	23.40	36.15	0.9	0.0	2	0.0	0.0
45	22.08	36.39	---	0.1	0	0.4	0.4
68	20.45	36.36	1.4	0.1	2	0.8	0.1
90	19.54	36.44	1.2	0.5	7	0.2	0.2
134	16.16	36.13	2.7	1.0	12	0.4	0.6
179	14.70	35.90	1.7	1.0	13	1.0	0.2
222	14.05	35.93	2.2	1.0	--	1.6	0.3
266	---	35.63	1.7	1.3	13	0.5	0.3
311	12.37	35.57	1.8	1.2	15	0.2	0.2
355	12.21	35.52	2.4	1.2	19	0.8	0.2
399	11.32	35.43	2.3	1.4	11	1.1	0.2
446	10.33	*35.91	1.9	0.9	12	0.7	0.3
543	*11.48	35.07	3.4	1.7	15	1.3	0.2

*Values not used in drawing smooth curves.

STATION NO. 5-2C-1

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	23.82	30.52	20.33	1.4	0.5	1	1.0	0.7
10	23.82	34.10	23.04	1.8	0.4	2	1.3	0.2
20	23.65	36.15	24.64	0.9	0.1	2	0.2	0.0
30	22.90	36.38	25.03	1.0	0.0	1	0.1	0.1
50	21.70	36.38	25.37	1.1	0.1	0	0.5	0.3
75	20.05	36.34	25.79	1.3	0.2	4	0.6	0.1
100	19.14	36.26	25.97	1.5	0.6	8	0.2	0.3
150	15.54	36.02	26.66	2.3	1.0	12	0.6	0.5
200	14.42	35.81	26.74	1.9	1.0	13	1.3	0.2
250	13.56	35.66	26.81	1.9	1.2	13	0.9	0.3
300	12.62	35.59	26.95	1.8	1.2	14	0.3	0.2
400	11.31	35.42	27.06	2.3	1.4	11	1.1	0.2
500	(9.58)	35.18	27.18	2.6	1.3	14	1.0	0.2

() Extrapolated values.

STATION NO. 5-2C-2

DATE 24 5 1952 (Day Month Year) LAT. 30° 08 ' N. LONG. 87° 30 ' W.

TIME 0729 (GCT) DEPTH 12 (Faths.) MAX. SAMPLE DEPTH -- (Meters) WIRE ANGLE 10 °

WATER COLOR -- (Code) WEATHER 01 (Code) SEA 2 (Code) SWELL -- (Direction) ° T. 0 (Hgt.) ft.

-- (Period) sec. CLOUDS -- (Type) -- (Amount) TEMP. 77.1 (Dry) °F. 75.0 (Wet) °F.

BAR. 29.99 in. REL. HUM. 91 % WIND 160 (Direction) ° T. 3 (Force) VIS. -- (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.92	31.98	0.8	0.0	1	1.1	0.4
9	21.84	34.88	1.8	0.1	1	1.0	0.3
19	20.61	36.18	1.2	0.2	2	0.4	0.4

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.92	31.98	21.11	0.8	0.0	1	1.1	0.4
10	21.40	35.32	24.65	1.8	1.0	1	0.9	0.3
20	(19.60)	(36.20)	25.80	1.2	0.2	2		

() Extrapolated values

STATION NO. 5-2C-3

DATE 24 5 1952 LAT. 29° 38' N. LONG. 87° 29' W.
Day Month Year
TIME 1148 DEPTH 35 MAX. SAMPLE DEPTH -- WIRE ANGLE 0 °
GCT Faths. Meters
WATER COLOR 60 WEATHER 01 SEA 2 SWELL 190 ° T. 3 ft.
Code Ci Code Code Direction Hgt.
-- sec. CLOUDS Cu 3 TEMP. 79.4 °F. 76.9 °F.
Period Type Amount Dry Wet
BAR. 30.01 in. REL. HUM. 91 % WIND 180 ° T. 3 VIS.9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.97	33.04	3.8	0.0	0	1.4	1.0
10	22.88	34.76	0.8	0.0	1	1.2	0.2
25	21.50	36.40	0.8	0.0	1	0.4	0.4
55	19.90	36.31	0.8	1.3	5	0.7	0.3

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	Ot	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot Mg/
0	24.97	33.04	21.89	3.8	0.0	0	1.4	1.
10	22.88	34.76	23.81	0.8	0.0	1	1.2	0.
20	21.90	35.57	24.70	0.8	0.0	1	0.7	0.
30	21.05	36.40	25.57	0.8	0.0	2	0.5	0.
50	20.12	36.34	25.77	0.8	0.3	4	0.7	0.

STATION NO. 5-2C-4

DATE 24 5 1952 LAT. 29° 10' N. LONG. 87° 29' W.
Day Month Year

TIME 1654 DEPTH 650 MAX. SAMPLE DEPTH -- WIRE ANGLE 6 °
GCT Faths. Meters

WATER COLOR 10 WEATHER 01 SEA 1 SWELL 160 ° T. 2 ft.
Code Code Code Direction Hgt.

6 sec. CLOUDS Cs,Cb 3 TEMP. 84.1 °F. 78.2 °F.
Period Type Amount Dry Wet

BAR. 30.06 in. REL. HUM. 76 % WIND 270 ° T. 2 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.58	34.69	1.0	0.0	1	0.4	0.1
9	24.74	35.98	1.0	0.1	1	0.7	0.2
24	23.84	36.41	0.7	0.1	1	---	0.2
49	22.38	*36.42	0.8	0.0	2	1.0	0.4
99	20.06	---	---	---	-	---	---
149	17.05	*36.74	1.4	0.8	9	0.6	0.1
198	15.40	36.12	2.2	1.1	5	0.4	0.1
298	13.11	35.68	2.0	1.2	15	0.7	0.4
399	11.36	35.33	2.5	1.6	26	0.0	0.7
498	9.80	35.21	3.9	1.9	18	0.2	0.8
598	6.91	34.93	3.0	1.8	26	0.5	0.3
697	5.83	34.89	5.1	1.9	31	---	0.0
797	5.31	34.93	4.0	1.8	18	0.4	---
897	5.00	34.93	2.2	1.8	17	0.8	0.0
998	4.76	34.94	3.7	1.5	16	0.2	1.2

*Values not used in drawing smooth curves.

STATION NO. 5-2C-4

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.58	34.69	22.64	1.0	0.0	1	0.4	0.1
10	24.73	35.98	24.19	1.0	0.1	1	0.7	0.2
20	24.18	36.20	24.52	0.8	0.1	1	0.8	0.2
30	23.55	36.42	24.87	0.7	0.1	1	0.9	0.2
50	22.36	36.62	25.37	0.8	0.0	2	1.0	0.4
75	21.16	36.69	25.76	0.9	0.2	4	0.9	0.3
100	20.04	36.66	26.04	1.1	0.4	6	0.8	0.3
150	17.03	36.44	26.63	1.4	0.8	9	0.6	0.1
200	15.35	36.12	26.78	2.2	1.1	5	0.4	0.1
250	14.15	35.85	26.83	2.1	1.1	10	0.5	0.3
300	13.09	35.67	26.91	2.0	1.2	15	0.7	0.4
400	11.35	35.33	26.99	2.5	1.6	26	0.0	0.7
500	9.73	35.20	27.17	3.9	1.9	18	0.2	0.8
600	6.85	34.93	27.40	3.0	1.8	26	0.5	0.3
700	5.81	34.89	27.51	5.1	1.9	31	0.4	0.0
800	5.29	34.93	27.61	4.0	1.8	18	0.4	0.0
1000	(4.75)	(34.94)	27.68	3.7	1.5	16	0.2	1.2

()Extrapolated values.

STATION NO. 5-2C-5

DATE 24 5 1952 LAT. 28° 37 ' N. LONG. 87° 29 ' W.
Day Month Year

TIME 2233 DEPTH 840 MAX. SAMPLE DEPTH -- WIRE ANGLE 0 °
GCT Faths. Meters

WATER COLOR 00 WEATHER 01 SEA 2 SWELL 160 ° T. 3 ft.
Code Code Code Direction Hgt.

7 sec. CLOUDS Ac,Cu 3 TEMP. 79.9 °F. 76.9 °F.
Period Type Amount Dry Wet

BAR. 30.00 in. REL. HUM. 87 % WIND 140 ° T. 2 VIS.9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.95	35.23	0.8	0.1	1	0.6	0.4
10	25.31	35.70	2.2	0.1	1	0.2	0.6
25	23.95	*36.38	0.4	0.3	1	0.0	0.3
50	23.16	*36.31	1.6	0.1	0	0.3	0.0
100	21.28	*37.29	0.6	0.1	1	0.0	0.0
150	19.31	36.64	1.2	0.4	8	0.2	0.5
200	16.92	36.33	2.6	0.7	13	0.0	0.1
251	15.37	*36.92	2.3	1.1	15	0.4	0.2
301	13.66	35.75	1.6	1.3	16	0.0	0.1
401	10.84	*35.86	2.8	1.6	25	0.0	0.1
501	9.00	---	4.0	---	29	0.2	0.3
602	7.47	34.94	3.0	2.3	17	0.1	0.2
801	6.39	34.89	2.7	2.1	20	0.4	0.4
1000	4.97	34.97	2.1	2.0	25	0.0	0.0
1200	4.43	35.05	2.0	1.8	25	0.3	0.1
1501	4.22	35.07	2.4	1.4	22	0.3	0.6

*Values not used in drawing smooth curves.

STATION NO. 5-2C-5

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. °C	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.95	35.23	22.93	0.8	0.1	1	0.6	0.4
10	25.31	35.70	23.90	2.2	0.1	1	0.2	0.6
20	24.25	35.92	24.29	1.0	0.2	1	0.1	0.4
30	23.84	36.21	24.63	0.6	0.3	1	0.1	0.2
50	23.16	36.69	25.19	1.6	0.1	0	0.3	0.0
75	22.25	36.78	25.52	1.1	0.1	1	0.2	0.0
100	21.28	36.79	25.80	0.6	0.1	1	0.0	0.0
150	19.31	36.64	26.22	1.2	0.4	8	0.2	0.5
200	16.92	36.33	26.57	2.6	0.7	13	0.0	0.1
250	15.39	36.08	26.74	2.3	1.1	15	0.4	0.2
300	13.67	35.76	26.87	1.6	1.3	16	0.0	0.1
400	10.85	35.36	27.11	2.8	1.6	25	0.0	0.1
500	9.00	35.10	27.22	4.0	1.9	29	0.2	0.3
600	7.49	34.94	27.32	3.0	2.3	17	0.1	0.2
700	6.95	34.90	27.37	2.9	2.2	18	0.3	0.3
800	6.40	34.89	27.43	2.7	2.1	20	0.4	0.4
1000	4.97	34.97	27.68	2.1	2.0	25	0.0	0.0
1200	4.43	35.05	27.80	2.0	1.8	25	0.3	0.1
1500	4.24	35.07	27.84	2.4	1.4	22	0.3	0.6

STATION NO. 5-2C-6

DATE 25 5 1952 LAT. 28° 04' N. LONG. 87° 31' W.
Day Month Year

TIME 0624 DEPTH --- MAX. SAMPLE DEPTH --- WIRE ANGLE 25°
GCT Faths. Meters

WATER COLOR 00 WEATHER -- SEA 2 SWELL -- ° T. -- ft.
Code Code Code Direction Hgt.

-- sec. CLOUDS -- -- TEMP. 78.6 °F. 74.2 °F.
Period Type Amount Dry Wet

BAR. 30.00 in. REL. HUM. 79 % WIND 120 ° T. 2 VIS.--
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.76	35.41	0.6	0.0	1	0.0	0.4
22	23.82	*37.47	0.6	0.1	1	0.7	0.5
45	23.26	*37.45	0.4	0.0	0	0.5	0.1
89	22.36	*37.68	1.2	0.1	1	0.4	0.6
134	19.67	---	---	0.5	8	0.0	0.2
177	17.54	36.53	1.0	0.6	9	0.0	0.3
220	16.34	*36.51	2.0	0.2	4	0.7	0.5
262	15.07	36.09	3.8	1.0	14	0.7	0.0
345	12.46	35.62	2.4	1.3	18	1.3	0.3
512	8.98	35.12	2.3	1.9	29	0.8	0.6
675	6.58	34.94	2.0	1.8	25	0.2	0.1
835	5.47	34.96	1.8	2.1	25	1.0	0.2
1074	4.64	34.97	1.7	1.8	23	0.5	0.3
1407	4.27	35.01	1.6	1.5	24	0.0	0.2
1850	4.18	*35.97	1.6	1.6	18	1.0	0.0
2527	4.20	*36.13	1.8	1.4	27	0.6	3.2

*Values not used in drawing smooth curves.

STATION NO: 5-2C-6

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.76	35.41	23.44	0.6	0.0	1	0.0	0.4
10	25.40	35.61	23.70	0.6	0.0	1	0.3	0.4
20	23.95	35.88	24.34	0.6	0.1	1	0.6	0.5
30	23.60	36.25	24.73	0.5	0.1	1	0.6	0.4
50	23.18	36.58	25.10	0.5	0.0	0	0.5	0.2
75	22.65	36.71	25.35	0.9	0.1	1	0.4	0.4
100	22.00	36.71	25.54	1.1	0.2	3	0.3	0.5
150	18.85	36.62	26.32	1.0	0.5	8	0.0	0.2
200	16.95	36.42	26.64	1.5	0.3	6	0.4	0.4
250	15.45	36.15	26.78	3.3	0.7	11	0.7	0.1
300	13.85	35.87	26.91	3.2	1.1	16	1.0	0.1
400	11.18	35.41	27.08	2.4	1.5	22	1.1	0.4
500	9.15	35.15	27.23	2.3	1.9	28	0.8	0.6
600	7.53	35.00	27.36	2.2	1.9	27	0.5	0.4
700	6.35	34.94	27.48	2.0	1.8	25	0.3	0.1
800	5.64	34.95	27.58	1.8	2.0	25	0.8	0.2
1000	4.82	34.97	27.69	1.7	1.9	24	0.6	0.3
1200	4.46	34.98	27.74	1.7	1.7	23	0.3	0.3
1500	4.23	(35.02)	(27.80)	1.6	1.5	23	0.2	0.2
2000	4.18	(35.03)	(27.81)	1.6	1.6	20	0.9	0.7
2500	4.20	---	---	1.7	1.4	27	0.6	3.1

() Extrapolated values.

STATION NO. 5-2C-7

DATE 25 5 1952 LAT. 27° 18' N. LONG. 87° 30' W.
Day Month Year

TIME 1501 DEPTH 1500 MAX. SAMPLE DEPTH -- WIRE ANGLE 24°
GCT Faths. Meters

WATER COLOR 00 WEATHER 01 SEA 1 SWELL 160 ° T. 2 ft.
Code Code Code Direction Hgt.

6 sec. CLOUDS Cs 1 TEMP. 84.0 °F. 76.1 °F.
Period Type Amount Dry Wet

BAR. 30.01 in. REL. HUM. 69 % WIND 160 ° T. 2 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.41	34.85	0.4	0.1	0	0.2	0.7
22	24.69	36.53	0.8	0.1	0	2.1	0.6
45	22.13	36.44	0.4	0.0	1	0.0	0.2
91	18.68	* 37.75	1.0	0.5	11	0.0	0.1
136	15.92	36.42	0.8	0.7	10	0.0	0.0
182	14.04	36.11	2.3	1.1	12	1.2	0.1
226	12.74	* 37.19	1.4	1.0	15	0.2	0.1
272	11.65	* 36.69	1.7	1.5	17	0.4	1.4**
362	9.43	* 36.92	---	1.8	--	0.2	0.7
542	6.74	34.97	2.3	2.2	--	1.7	0.1
723	5.48	* 35.05	2.2	2.0	--	0.0	0.3
903	4.81	34.99	2.7	1.8	26	0.4	0.1
1173	4.29	* 35.19	2.4	1.6	27	0.8	0.0
1540	4.18	35.05	1.8	1.4	6	0.0	0.3
2016	4.17	35.01	1.6	1.4	22	0.4	0.1
2707	4.19	35.01	1.7	1.7	19	1.2	0.6

* Values not used in drawing smooth curves.
** Sample contaminated with ethylene glycol.

STATION NO. 5-2C-7

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.41	34.85	22.81	0.4	0.1	0	0.2	0.7
10	26.11	35.77	23.60	0.6	0.1	0	1.1	0.7
20	24.71	36.53	24.61	0.8	0.1	0	1.9	0.6
30	23.62	36.52	24.93	0.7	0.1	0	1.4	0.5
50	21.72	36.44	25.42	0.5	0.1	2	0.0	0.2
75	19.80	36.43	25.93	0.8	0.3	8	0.0	0.1
100	18.27	36.43	26.32	1.0	0.5	11	0.0	0.1
150	15.23	36.35	26.98	1.3	0.8	11	0.4	0.0
200	13.42	36.00	27.10	1.9	1.1	13	0.8	0.1
250	12.11	35.77	27.19	1.6	1.3	16	0.3	0.2
300	10.92	35.54	27.23	1.8	1.6	--	0.3	0.4
400	8.76	35.24	27.36	2.0	1.9	--	0.5	0.6
500	7.23	35.03	27.43	2.2	2.1	--	1.3	0.2
600	6.27	34.95	27.50	2.3	2.1	--	1.2	0.2
700	5.58	34.94	27.58	2.2	2.0	--	0.2	0.3
800	5.14	34.97	27.65	2.4	1.9	--	0.2	0.2
1000	4.58	35.00	27.75	2.6	1.7	26	0.5	0.1
1200	4.28	35.02	27.79	2.4	1.6	25	0.7	0.0
1500	4.20	35.05	27.82	1.9	1.4	8	0.1	0.3
2000	4.17	35.01	27.80	1.6	1.4	21	0.4	0.1
2500	--	---	---	1.7	1.6	20	0.9	0.5

STATION NO. 5-2C-8

DATE 25 5 1952 LAT. 26° 39' N. LONG. 87° 30' W.
Day Month Year

TIME 2124 2309 DEPTH 1600 MAX. SAMPLE DEPTH -- WIRE ANGLE 14°
GCT Faths. Meters

WATER COLOR - WEATHER 01 SEA 0 SWELL 280 ° T. 3 ft.
Code Code Code Direction Hgt.

5 sec. CLOUDS Ci,Cs 2 TEMP. 78.3 °F. 74.8 °F.
Period Type Amount Dry Wet

BAR. 29.96 in. REL. HUM. 87 % WIND -- ° T. 0 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.73	35.70	0.6	0.0	1	0.4	0.6
9	24.92	36.33	0.4	0.1	2	0.5	0.2
24	24.12	36.80	0.3	0.0	0	0.4	0.4
49	22.54	36.45	0.4	0.0	1	0.0	0.4
74	21.26	36.55	0.4	0.1	2	0.2	0.1
99	19.77	36.60	0.9	0.4	5	0.7	0.2
148	17.37	36.36	0.8	0.8	9	1.3	0.4
192	15.74	36.11	1.2	1.0	14	0.2	0.2
240	13.89	35.81	1.7	1.0	13	0.6	0.1
288	12.08	35.59	1.8	1.5	16	---	0.8
384	9.93	35.41	2.2	1.6	19	0.8	0.5
575	7.07	*36.00	2.4	1.9	28	0.2	0.2
765	5.57	*35.97	2.5	2.2	26	0.8	0.0
954	4.84	*35.95	2.2	1.8	15	0.3	0.7
1237	4.26	*35.16	2.0	1.6	18	0.0	0.5
1620	4.16	35.03	1.9	1.4	21	0.2	0.1
2106	4.19	35.07	2.4	---	22	0.1	0.0
2778	4.22	34.92	2.7	1.7	21	0.8	0.3

* Values not used in drawing smooth curves.

STATION NO. 5-2C-8

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.73	35.70	23.35	0.6	0.0	1	0.4	0.6
10	24.85	36.45	24.51	0.4	0.1	2	0.5	0.2
20	24.26	36.79	24.94	0.3	0.0	1	0.4	0.3
30	23.79	36.73	25.04	0.3	0.0	0	0.3	0.4
50	22.50	36.45	25.20	0.4	0.0	1	0.0	0.4
75	21.26	36.56	25.63	0.4	0.1	2	0.2	0.1
100	19.68	36.60	26.09	0.9	0.4	5	0.7	0.2
150	17.27	36.35	26.51	0.8	0.7	9	1.2	0.4
200	15.43	36.06	26.71	1.3	1.0	14	0.6	0.2
250	13.52	35.75	26.88	1.7	1.1	14	0.6	0.2
300	11.72	35.55	27.09	1.9	1.5	16	0.7	0.8
400	9.68	35.38	27.32	2.2	1.6	20	0.7	0.5
500	8.07	35.15	27.40	2.3	1.8	24	0.4	0.2
600	6.81	34.99	27.45	2.4	1.9	28	0.3	0.1
700	6.01	34.97	27.54	2.5	1.8	27	0.6	0.1
800	5.40	34.96	27.62	2.4	2.1	24	0.7	0.1
1000	4.73	34.95	27.69	2.2	1.8	15	0.3	0.7
1200	4.32	34.96	27.74	2.0	1.6	18	0.0	0.5
1500	4.20	35.02	27.80	1.9	1.5	20	0.1	0.2
2000	4.18	35.06	27.83	2.3	-	22	0.1	0.0

STATION NO. 5-2C-9

DATE 26 5 1952 LAT. 26° 00' N. LONG. 87° 30' W.
Day Month Year

TIME 0553 DEPTH 1650 MAX. SAMPLE DEPTH --- WIRE ANGLE 19 °
GCT Faths. Meters

WATER COLOR 00 WEATHER 01 SEA 0 SWELL -- ° T. 2 ft.
Code Code Code Direction Hgt.

-- sec. CLOUDS -- -- TEMP. 79.0 °F. 74.0 °F.
Period Type Amount Dry Wet

BAR. 29.95 in. REL. HUM. 79 % WIND 160 ° T. 1 VIS. --
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.74	35.46	0.7	0.0	0	---	0.3
23	23.72	35.90	0.4	0.1	1	0.4	0.0
47	21.94	36.35	1.6	0.1	0	0.6	0.5
94	19.80	36.44	0.8	0.2	7	0.2	0.3
142	16.81	36.29	2.5	0.7	12	1.1	0.4
189	15.15	36.02	1.5	0.8	14	0.2	0.2
236	13.66	35.79	1.8	1.1	21	0.8	0.1
283	12.21	35.64	1.8	1.4	19	1.2	0.3
377	10.03	35.25	2.1	1.7	25	0.2	0.3
564	7.33	34.97	2.4	2.1	30	0.4	0.1
751	5.88	34.97	2.4	1.8	30	0.8	0.1
937	4.96	34.99	2.3	1.7	21	0.0	0.4
1216	4.36	34.99	2.4	2.3	22	0.6	---
1593	4.21	35.03	2.2	1.5	22	0.6	0.0
2079	4.18	35.03	1.8	1.3	21	0.4	0.0

STATION NO. 5-2C-9

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Pr Mg
0	25.74	35.46	23.48	0.7	0.0	0		0
10	25.15	35.65	23.81	0.6	0.1	0		0
20	24.25	35.84	24.23	0.4	0.1	1		0
30	23.27	36.21	24.80	0.8	0.1	1	0.5	0
50	21.76	36.36	25.34	1.5	0.1	0	0.6	0
75	20.55	36.43	25.72	1.1	0.2	3	0.4	0
100	19.46	36.43	26.02	1.0	0.3	7	0.3	0
150	16.50	36.25	26.61	2.3	0.7	12	1.0	0
200	14.75	35.96	26.79	1.6	0.9	16	0.3	0
250	13.20	35.75	26.96	1.8	1.2	20	0.9	0
300	11.83	35.56	27.08	1.9	1.5	20	1.0	0
400	9.62	35.22	27.21	2.1	1.7	26	0.2	0
500	8.17	35.05	27.31	2.3	2.0	28	0.3	0
600	7.01	34.97	27.41	2.4	2.0	30	0.5	0
700	6.23	34.97	27.52	2.4	1.9	30	0.7	0
800	5.60	34.98	27.60	2.4	1.8	28	0.6	0
1000	4.78	34.99	27.71	2.3	1.8	21	0.1	0
1200	4.40	34.99	27.76	2.4	2.3	22	0.6	0
1500	4.23	35.02	27.80	2.2	1.7	22	0.6	0
2000	4.18	35.03	27.81	1.9	1.3	21	0.4	0

STATION NO. 5-2C-10

ATE 26 5 1952 LAT. 25° 19' N. LONG. 87° 45' W.
Day Month Year

IME 1308 DEPTH 1820 MAX. SAMPLE DEPTH -- WIRE ANGLE 8 °
GCT Faths. Meters

ATER COLOR 00 WEATHER 01 SEA 0 SWELL 115 ° T. 2 ft.
Code Code Code Direction Hgt.

6 sec. CLOUDS Ci 1 TEMP. 78.4 °F. 74.5 °F.
eriod Type Amount Dry Wet

AR. 29.96 in. REL. HUM. 83 % WIND -- ° T. 0 VIS. 9
Direction Force Code

OBSERVED VALUES

epth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.74	37.45	0.6	0.0	2	0.4	0.6
24	23.68	36.22	0.4	0.1	1	0.7	0.1
49	22.68	36.45	0.6	0.2	2	0.6	0.3
98	20.34	*37.68	0.7	0.3	4	0.2	0.4
148	17.14	*37.54	0.8	0.8	12	0.4	0.3
196	15.07	36.09	1.6	1.0	16	---	0.7
244	13.58	*35.64	1.6	1.3	17	0.2	0.2
293	12.39	*35.81	2.6	1.5	24	0.7	0.1
387	9.73	35.23	2.3	1.7	25	0.2	0.1
571	6.87	35.03	2.4	2.1	27	0.6	0.1
752	5.50	34.96	2.8	1.8	28	0.8	0.0
931	4.76	34.97	2.8	1.6	21	---	0.3
1194	4.32	35.08	2.3	1.7	23	0.8	0.7
1544	4.20	35.03	2.0	1.4	14	0.0	0.5
1990	4.20	35.03	2.2	1.4	25	0.0	0.2
2667	4.22	35.05	2.2	1.4	22	0.8	0.6

*Values not used in drawing smooth curves.

STATION NO. 5-2C-10

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.74	37.45	24.98	0.6	0.0	2	0.4	0.6
10	25.40	36.45	24.34	0.5	0.0	2	0.5	0.4
20	24.50	36.22	24.44	0.4	0.1	1	0.7	0.2
30	23.35	36.23	24.79	0.5	0.1	1	0.7	0.1
50	22.60	36.50	25.21	0.6	0.2	2	0.6	0.3
75	21.65	36.78	25.69	0.7	0.3	3	0.4	0.4
100	20.25	36.82	26.11	0.7	0.3	4	0.2	0.4
150	17.05	36.55	26.71	0.8	0.8	12	0.4	0.3
200	14.91	36.05	26.82	1.6	1.0	16	0.3	0.7
250	13.45	35.73	26.89	1.7	1.3	18	0.3	0.2
300	12.21	35.50	26.96	2.6	1.5	24	0.7	0.1
400	9.44	35.22	27.24	2.3	1.7	25	0.2	0.1
500	7.83	35.09	27.39	2.4	1.9	26	0.4	0.1
600	6.62	35.01	27.50	2.5	2.1	27	0.6	0.1
700	5.87	34.97	27.57	2.7	1.9	28	0.7	0.0
800	5.27	34.96	27.64	2.8	1.7	25	0.8	0.1
1000	4.60	35.00	27.74	2.7	1.6	22	0.8	0.4
1200	4.32	35.08	27.84	2.3	1.7	23	0.8	0.7
1500	4.20	35.04	27.82	2.0	1.4	15	0.1	0.5
2000	4.20	35.03	27.81	2.2	1.4	25	0.0	0.2
2500	4.21	35.05	27.82	2.2	1.4	23	0.6	0.5

STATION NO. 5-20-11

DATE 26 5 1952 LAT. 24° 53' N. LONG. 87° 00' W.
Day Month Year
TIME 2130 DEPTH 1600 MAX. SAMPLE DEPTH -- WIRE ANGLE 9 °
GCT Faths. Meters
WATER COLOR 00 WEATHER 01 SEA 1 SWELL 320 ° T. 1.5 ft.
Code Code Code Direction Hgt.
5 sec. CLOUDS Cc Cu 3 TEMP. 82.7 °F. 76.8 °F.
Period Type Amount Dry Wet
BAR. 29.94 in. REL. HUM. 76 % WIND 320 ° T. 1 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.49	37.70	0.6	0.0	0	0.0	0.1
24	23.75	36.31	0.6	0.0	0	0.7	0.4
49	22.13	36.36	0.4	0.0	0	0.0	0.7
98	19.18	36.53	0.7	0.4	10	0.2	0.1
147	16.08	36.15	1.1	---	10	0.0	0.2
196	14.42	35.91	1.6	1.1	16	0.1	0.0
245	12.41	35.64	1.8	1.2	16	0.3	0.6
294	11.02	35.39	1.8	1.4	27	0.6	0.0
394	8.98	35.14	2.0	1.9	20	0.3	0.2
590	6.30	34.91	2.3	2.0	32	0.4	0.3
788	5.13	34.96	2.0	1.7	25	0.2	0.0
986	4.45	34.98	2.0	1.6	25	0.0	0.3
1282	4.21	34.98	1.8	2.3	5	0.4	0.1
1679	4.18	35.03	1.9	1.6	15	1.2	0.1
2172	---	35.07	---	---	--	---	---
2875	4.21	34.99	1.9	1.6	20	0.6	0.1

STATION NO. 5-2C-11

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot Mg/l
0	26.49	37.70	24.93	0.6	0.0	0	0.0	0.1
10	26.00	36.57	24.24	0.6	0.0	0	0.3	0.2
20	24.30	36.32	24.58	0.6	0.0	0	0.6	0.3
30	23.30	36.32	24.87	0.6	0.0	0	0.5	0.5
50	22.09	36.36	25.25	0.4	0.0	0	0.0	0.7
75	20.73	36.47	25.71	0.6	0.2	5	0.1	0.4
100	19.10	36.51	26.17	0.7	0.4	10	0.2	0.1
150	15.98	36.14	26.65	1.1	0.7	10	0.0	0.2
200	14.34	35.87	26.81	1.6	1.1	16	0.1	0.0
250	12.29	35.59	27.02	1.8	1.2	17	0.3	0.5
300	10.90	35.37	27.11	1.8	1.4	27	0.6	0.0
400	8.86	35.13	27.26	2.0	1.9	20	0.3	0.2
500	7.29	34.95	27.36	2.2	2.0	27	0.4	0.3
600	6.25	34.91	27.47	2.3	2.0	32	0.4	0.3
700	5.56	34.94	27.58	2.1	1.8	28	0.3	0.1
800	5.09	34.96	27.66	2.0	1.7	25	0.2	0.0
1000	4.41	34.98	27.75	2.0	1.6	24	0.0	0.3
1200	4.28	34.98	27.76	1.9	2.1	10	0.3	0.2
1500	4.20	35.01	27.79	1.9	1.9	10	0.8	0.1
2000	4.20	35.06	27.83	1.9	-	16	1.0	0.1
2500	4.20	35.05	27.83	1.9	-	18	0.8	0.1

STATION NO. 5-2C-12

DATE 27 5 1952 LAT. 24° 25 ' N. LONG. 86° 28 ' W.
Day Month Year

TIME 0428 DEPTH 1150 MAX. SAMPLE DEPTH -- WIRE ANGLE 17 °
GCT Faths. Meters

WATER COLOR 00 WEATHER 01 SEA 1 SWELL -- ° T. -- ft.
Code Code Code Direction Hgt.

-- sec. CLOUDS -- -- TEMP. 79.4 °F. 75.8 °F.
Period Type Amount Dry Wet

BAR. 29.94 in. REL. HUM. 87 % WIND 10 ° T. 2 VIS. 8
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.37	37.03	0.6	0.1	0	0.3	0.4
9	25.99	36.42	0.6	0.0	1	0.6	---
23	24.00	36.36	1.0	0.0	0	0.0	0.3
48	22.27	36.52	1.2	0.1	2	0.0	0.3
96	18.59	36.43	0.9	0.6	11	0.0	0.4
143	16.68	36.21	1.2	0.8	13	0.4	0.6
190	14.78	36.09	1.8	1.5	8	0.3	0.4
238	12.69	36.06	1.8	1.4	12	0.4	0.0
286	11.28	35.81	1.9	1.6	21	1.2	0.5
381	8.98	35.12	2.1	2.7	30	0.9	0.2
477	7.46	34.97	2.2	1.9	30	---	0.0
574	6.41	34.90	2.2	2.1	28	---	0.6
670	*5.20	34.93	2.2	1.6	22	0.4	0.3
961	4.56	34.98	2.1	1.6	24	1.3	0.1
1354	4.20	35.03	1.9	1.3	15	0.7	0.3
1847	4.18	35.04	1.6	1.5	9	0.6	0.2

*Values not used in drawing smooth curves.

STATION NO. 5-20-12

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot Mg/l
0	26.37	37.03	24.47	0.6	0.1	0	0.3	0.4
10	25.92	36.41	24.15	0.6	0.0	1	0.6	0.4
20	24.55	36.36	24.53	0.9	0.0	0	0.0	0.3
30	23.35	36.38	24.90	1.1	0.0	1	0.0	0.3
50	22.00	36.52	25.40	1.2	0.1	2	0.0	0.3
75	20.00	36.48	25.91	1.0	0.4	7	0.0	0.4
100	18.30	36.41	26.30	0.9	0.6	11	0.0	0.4
150	16.42	36.19	26.59	1.3	0.9	12	0.4	0.6
200	14.35	36.08	26.97	1.8	1.5	9	0.3	0.3
250	12.33	36.03	27.35	1.8	1.5	14	0.6	0.1
300	10.92	35.69	27.35	1.9	1.8	22	1.2	0.5
400	8.63	35.09	27.27	2.1	2.5	30	-	0.2
500	7.20	34.95	27.37	2.2	1.9	30	-	0.1
600	6.22	34.90	27.47	2.2	1.9	26	-	0.5
700	5.53	34.94	27.59	2.2	1.6	22	0.5	0.3
800	5.04	34.96	27.66	2.2	1.6	23	0.8	0.2
1000	4.49	34.98	27.74	2.1	1.5	23	1.2	0.1
1200	4.31	35.01	27.78	2.0	1.4	17	0.9	0.2
1500	4.20	35.04	27.82	1.8	1.4	13	0.7	0.3

STATION NO. 5-2C-13

DATE 27 5 1952 LAT. 23° 57' N. LONG. 85° 57' W.
Day Month Year

TIME 1236 DEPTH 1850 MAX. SAMPLE DEPTH -- WIRE ANGLE 35 °
GCT Faths. Meters

WATER COLOR 00 WEATHER 01 SEA 1 SWELL 320 ° T. 2 ft.
Code Code Code Direction Hgt.

7 sec. CLOUDS Ci,Cu 4 TEMP. 81.5 °F. 76.3 °F.
Period Type Amount Dry Wet

BAR. 29.94 in. REL. HUM. 76 % WIND 010 ° T. 1 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.65	36.55	0.8	0.0	0	0.3	0.0
20	26.56	36.59	1.8	0.0	-	0.4	0.9
41	24.56	36.48	1.2	0.0	1	0.3	0.3
80	22.74	36.45	0.8	0.0	1	0.1	---
118	21.28	36.48	0.8	0.1	2	0.7	0.4
155	19.09	36.47	2.0	0.3	9	0.5	0.0
191	17.37	36.47	1.5	0.4	6	1.0	0.3
226	15.80	36.11	2.8	0.8	17	0.2	0.0
294	13.15	35.68	2.2	1.2	19	0.2	0.4
422	10.07	35.26	2.8	1.3	22	0.1	0.2
541	7.87	35.14	3.5	1.9	21	0.6	0.4
659	6.61	34.96	3.2	1.8	22	0.8	---
837	5.47	34.95	2.4	1.8	27	0.8	0.4
1068	4.56	*35.46	3.4	1.6	23	0.3	0.2
1360	4.23	*35.03	2.8	1.6	23	0.2	0.0
1917	4.21	*36.44	1.8	0.3	7	0.3	0.4

*Values not used in drawing smooth curves.

STATION NO. 5-2C-13

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.65	36.55	24.02	0.8	0.0	0	0.3	0.0
10	26.61	36.57	24.05	1.3	0.0	0	0.4	0.5
20	26.56	36.59	24.08	1.8	0.0	0	0.4	0.9
30	25.50	36.55	24.38	1.5	0.0	1	0.4	0.6
50	24.14	36.48	24.74	1.1	0.0	1	0.3	0.3
75	22.94	36.46	25.08	0.9	0.0	1	0.1	0.3
100	22.07	36.47	25.34	0.8	0.1	2	0.4	0.4
150	19.50	36.47	26.04	1.8	0.3	8	0.5	0.1
200	16.92	36.44	26.66	1.8	0.5	9	0.8	0.2
250	14.82	35.93	26.75	2.6	0.9	18	0.2	0.1
300	13.06	35.64	26.90	2.2	1.2	19	0.2	0.4
400	10.58	35.30	27.11	2.7	1.3	21	0.1	0.2
500	8.60	35.19	27.35	3.3	1.7	21	0.4	0.3
600	7.18	35.04	27.45	3.4	1.8	21	0.7	0.4
700	6.33	34.95	27.49	3.0	1.8	24	0.8	0.4
800	5.67	34.95	27.58	2.6	1.8	26	0.8	0.4
1000	4.78	34.99	27.71	3.1	1.7	24	0.4	0.3
1200	4.38	35.02	27.78	3.1	1.6	23	0.3	0.1
1500	4.22	---	---	2.5	1.3	19	0.2	0.1

STATION NO. 5-2C-14

ATE 27 5 1952 LAT. 23° 28' N. LONG. 85° 26' W.
Day Month Year

IME 2038 DEPTH 610 MAX. SAMPLE DEPTH 1145 WIRE ANGLE 7 °
GCT Faths. Meters

ATER COLOR 00-10 WEATHER 01 SEA 1 SWELL --- ° T. --ft.
Code Code Code Direction Hgt.

-- sec. CLOUDS Cu 1 TEMP. 81.9 °F. 77.4 °F.
eriod Type Amount Dry Wet

AR. 29.94 in. REL. HUM. 80 % WIND 070 ° T. 2 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	28.40	35.99	1.2	0.0	1	0.0	0.2
10	27.95	35.91	1.2	0.1	1	1.6	0.3
25	27.83	35.93	1.0	0.0	0	0.5	0.3
49	26.69	35.96	1.8	0.0	1	0.5	0.1
74	25.93	36.04	1.5	0.0	2	0.8	0.4
99	25.47	36.13	0.9	0.2	-	0.4	0.2
148	22.95	36.69	1.1	0.2	4	0.0	0.4
198	20.97	36.94	1.2	0.4	6	0.0	0.2
247	19.04	36.58	1.8	0.4	5	0.0	0.2
296	17.14	36.33	1.4	0.6	10	0.4	0.1
395	15.42	36.02	2.2	0.9	15	0.6	0.2
494	13.12	35.60	2.7	1.1	19	1.4	0.2
592	10.53	35.24	3.4	1.5	25	0.2	0.2
691	8.34	34.96	3.2	2.0	31	0.7	0.3
791	6.54	35.03	3.8	1.8	17	1.3	0.2
991	5.10	34.87	2.6	1.6	20	0.0	0.0

STATION NO. 5-2C-14

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot Mg/l
0	28.40	35.99	23.03	1.2	0.0	1	0.0	0.2
10	27.95	35.91	23.12	1.2	0.1	1	1.6	0.3
20	27.88	35.92	23.15	1.1	0.0	0	0.9	0.3
30	27.65	35.94	23.24	1.0	0.0	0	0.5	0.3
50	26.62	35.97	23.60	1.2	0.0	1	0.5	0.1
75	25.92	36.05	23.87	1.5	0.0	2	0.8	0.4
100	25.46	36.14	24.09	0.9	0.1	3	0.4	0.2
150	22.89	36.70	25.28	1.1	0.2	4	0.0	0.4
200	20.92	36.93	26.01	1.2	0.4	6	0.0	0.2
250	18.85	36.55	26.27	1.8	0.4	5	0.0	0.2
300	17.05	36.32	26.54	1.4	0.6	10	0.4	0.1
400	15.39	35.99	26.66	2.2	0.9	15	0.6	0.2
500	13.04	35.57	26.85	2.7	1.1	19	1.3	0.2
600	10.45	35.22	27.06	3.4	1.5	25	0.2	0.2
700	8.18	34.96	27.24	3.3	2.0	30	0.7	0.3
800	6.48	35.03	27.53	3.7	1.8	17	1.2	0.2
1000	(5.00)	(34.87)	(27.59)	-	-	--	-	-

() Extrapolated values.

STATION NO. 5-2C-15

.TE 28 5 1952 LAT. 23° 00' N. LONG. 84° 57' W.
Day Month Year

ME 0352 DEPTH 1100 MAX. SAMPLE DEPTH -- WIRE ANGLE 19°
GCT Faths. Meters

TER COLOR 00 WEATHER 01 SEA 1 SWELL -- ° T. -- ft.
Code Code Code Direction Hgt.

-- sec. CLOUDS -- -- TEMP. 82.1 °F. 77.0°F.
riod Type Amount Dry Wet

AR. 29.96 in. REL. HUM. 80 % WIND 030 ° T. 2 VIS.-
Direction Force Code

OBSERVED VALUES

pth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.85	36.09	0.6	0.0	1	1.4	0.1
9	27.77	36.22	0.8	0.1	0	0.3	0.3
24	27.42	36.09	0.8	0.0	1	0.2	0.1
47	26.77	36.06	1.0	0.1	0	0.2	0.3
93	25.83	36.09	0.8	0.1	2	0.3	0.3
139	24.81	---	1.0	0.2	2	0.1	0.4
185	21.72	36.74	1.3	0.2	4	0.6	0.2
232	20.05	36.73	1.0	0.3	6	0.4	1.0
278	---	36.55	1.4	0.4	9	---	1.4
368	16.34	36.24	1.7	---	10	0.0	0.0
457	14.15	35.84	1.6	1.0	17	0.2	0.0
547	12.07	35.61	2.3	1.2	16	0.1	0.3
729	8.61	35.08	2.7	1.7	19	0.5	0.2
913	6.08	34.94	2.8	2.1	26	0.8	0.2
290	4.41	34.99	2.4	1.6	17	0.6	0.5
685	4.21	35.01	3.0	1.5	23	0.3	0.0

STATION NO. 5-2C-15

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot Mg/l
0	27.85	36.09	23.29	0.6	0.0	1	1.4	0.1
10	27.75	36.21	23.41	0.8	0.1	0	0.3	0.3
20	27.54	36.11	23.41	0.8	0.0	1	0.2	0.2
30	27.30	36.07	23.45	0.8	0.0	1	0.2	0.2
50	26.76	36.06	23.29	1.0	0.1	0	0.2	0.3
75	26.21	36.08	23.81	0.9	0.1	1	0.3	0.3
100	25.70	36.12	23.99	0.8	0.1	2	0.3	0.3
150	24.22	36.62	24.83	1.1	0.2	2	0.2	0.3
200	21.10	36.75	25.82	1.2	0.2	5	0.5	0.5
250	19.51	36.65	26.17	1.2	0.3	7	0.3	1.2
300	18.10	36.48	26.40	1.5	0.5	9	0.2	1.0
400	15.53	36.06	26.69	1.7	0.8	13	0.1	0.0
500	13.14	35.74	26.96	1.9	1.1	17	0.2	0.1
600	10.94	35.45	27.16	2.4	1.3	17	0.2	0.3
700	9.12	35.14	27.23	2.6	1.6	19	0.4	0.2
800	7.52	35.01	27.37	2.7	1.8	22	0.6	0.2
1000	5.44	34.94	27.60	2.7	2.0	24	0.8	0.3
1200	4.67	34.98	27.71	2.5	1.7	19	0.6	0.4
1500	4.23	35.00	27.78	2.7	1.5	20	0.4	0.2

STATION NO. 5-2C-16

ATE 28 5 1952 LAT. 22° 33' N. LONG. 84° 28' W.
Day Month Year

IME 1125 DEPTH 650 MAX. SAMPLE DEPTH -- WIRE ANGLE 11 °
GCT Faths. Meters

ATER COLOR 00 WEATHER 01 SEA 0 SWELL -- ° T. -- ft.
Code Code Code Direction Hgt.

-- sec. CLOUDS Ci,As 9 TEMP. 81.9 °F. 77.2 °F.
eriod Type Amount Dry Wet

AR. 29.93 in. REL. HUM. 80 % WIND -- ° T. 0 VIS. 9
Direction Force Code

OBSERVED VALUES

epth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	28.13	36.09		0.1	0	---	0.1
9	28.01	*36.85		0.0	1	0.4	0.7
24	27.39	36.08		0.1	0	---	0.2
49	26.62	36.10		0.0	0	0.6	0.2
98	24.99	36.26		0.0	1	0.4	3.5
147	22.97	36.74		0.2	3	0.3	0.1
195	20.59	36.77		0.3	5	0.5	0.2
244	19.19	36.65		0.4	6	0.4	0.2
292	18.14	36.53		0.5	6	0.0	0.1
388	16.05	36.20		0.8	10	0.4	0.0
486	13.38	35.71		1.2	16	0.1	0.0
584	10.70	35.32		1.5	14	---	0.7
682	8.53	35.02		1.8	25	0.1	0.3
780	6.84	34.90		---	24	0.8	0.0
880	5.74	34.90		1.8	28	0.4	0.1
1076	4.60	34.97		1.7	14	0.8	0.7

*Values not used in drawing smooth curves.

STATION NO: 5-2C-16

DATE 28 5 1952 LAT. 22° 33' N. LONG. 84° 28' W.
Day Month Year
TIME 1125 DEPTH 650 MAX. SAMPLE DEPTH -- WIRE ANGLE 11 °
GCT Faths. Meters
WATER COLOR 00 WEATHER 01 SEA 0 SWELL -- ° T. -- ft.
Code Code Code Direction Hgt.
-- sec. CLOUDS Ci,As 9 TEMP. 81.9 °F. 77.2 °F.
Period Type Amount Dry Wet
BAR. 29.93 in. REL. HUM. 80 % WIND -- ° T. 0 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	28.13	36.09	0.6	0.1	0	---	0.1
9	28.01	*36.85	1.2	0.0	1	0.4	0.7
24	27.39	36.08	0.8	0.1	0	---	0.2
49	26.62	36.10	0.7	0.0	0	0.6	0.2
98	24.99	36.26	0.8	0.0	1	0.4	3.5
147	22.97	36.74	---	0.2	3	0.3	0.1
195	20.59	36.77	1.2	0.3	5	0.5	0.2
244	19.19	36.65	1.4	0.4	6	0.4	0.2
292	18.14	36.53	1.2	0.5	6	0.0	0.1
388	16.05	36.20	0.8	0.8	10	0.4	0.0
486	13.38	35.71	2.3	1.2	16	0.1	0.0
584	10.70	35.32	1.9	1.5	14	---	0.7
682	8.53	35.02	2.8	1.8	25	0.1	0.3
780	6.84	34.90	2.9	---	24	0.8	0.0
880	5.74	34.90	1.8	1.8	28	0.4	0.1
1076	4.60	34.97	2.8	1.7	14	0.8	0.7

*Values not used in drawing smooth curves.

STATION NO. 5-2C-17

DATE 28 5 1952 LAT. 22° 32' N. LONG. 84° 57' W.
Day Month Year

TIME 1806 DEPTH 1200 MAX. SAMPLE DEPTH -- WIRE ANGLE 50 °
GCT Faths. Meters

WATER COLOR 00 WEATHER 00 SEA 0 SWELL 020 ° T. 1 ft.
Code Code Code Direction Hgt.

7 sec. CLOUDS Ci,Cu 1 TEMP. 91.0 °F. 79.5 °F.
Period Type Amount Dry Wet

BAR. 29.96 in. REL. HUM. 62 % WIND -- ° T. 0 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.89	36.03	0.8	0.0	0	0.9	0.3
24	27.10	36.07	1.0	0.2	2	0.7	0.6
49	26.36	36.04	0.6	0.1	1	0.6	0.4
99	25.30	36.18	0.8	0.1	1	0.6	0.8
149	21.94	36.80	0.2	0.2	5	0.6	0.5
199	20.02	36.65	0.8	0.4	7	0.0	5.8
249	18.63	36.51	0.7	0.4	8	0.0	0.3
298	17.42	36.33	0.8	0.5	7	0.3	0.4
397	15.36	35.99	1.8	0.8	10	1.0	---
496	13.23	35.66	2.2	0.9	9	1.6	0.0
595	10.59	35.24	2.6	1.5	15	0.3	0.6
693	8.51	34.99	2.8	1.9	34	---	0.3
890	5.96	34.89	3.4	1.8	27	0.4	0.3
1189	4.49	34.97	2.6	1.6	17	0.3	1.2
1590	4.20	35.00	2.2	1.4	--	0.4	0.1

STATION NO. 5-2C-17

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.89	36.03	23.23	0.8	0.0	0	0.9	0.3
10	27.56	36.06	23.36	0.9	0.1	1	0.8	0.4
20	27.15	36.07	23.50	1.0	0.2	2	0.7	0.6
30	26.85	36.06	23.59	0.9	0.2	2	0.7	0.5
50	26.35	36.04	23.73	0.6	0.1	1	0.6	0.4
75	25.89	36.12	23.94	0.7	0.1	1	0.6	0.6
100	25.25	36.20	24.20	0.8	0.1	1	0.6	0.8
150	21.90	36.79	25.63	0.2	0.2	5	0.6	0.6
200	20.00	36.64	26.04	0.8	0.4	7	0.0	5.7
250	18.57	36.49	26.29	0.7	0.4	8	0.0	0.3
300	17.35	36.32	26.46	0.8	0.5	7	0.3	0.4
400	15.28	35.97	26.67	1.8	0.7	10	1.0	0.2
500	13.15	35.64	26.88	2.2	0.9	9	1.5	0.0
600	10.50	35.22	27.05	2.6	1.5	16	0.3	0.6
700	8.40	34.98	27.21	2.8	1.9	34	0.4	0.3
800	6.90	34.92	27.39	3.1	1.8	30	0.4	0.3
1000	5.30	34.92	27.60	3.1	1.7	22	0.4	0.6
1200	4.45	34.97	27.73	2.6	1.6	--	0.3	1.2
1500	4.21	34.99	27.77	2.3	1.4	--	0.4	0.3

STATION NO. 5-2C-18

DATE 29 5 1952 LAT. 23° 00' N. LONG. 84° 57' W.
Day Month Year

TIME 0121 DEPTH 1100 MAX. SAMPLE DEPTH -- WIRE ANGLE 21 °
GCT 00- Faths. Meters

WATER COLOR 10 WEATHER 01 SEA 1 SWELL -- ° T. -- ft.
Code Code Code Direction Hgt.

-- sec. CLOUDS -- -- TEMP. 81.4 °F. 77.8 °F.
Period Type Amount Dry Wet

BAR. 29.92 in. REL. HUM. 88 % WIND 050 ° T. 2 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.85	36.00	0.6	0.0	0	0.0	0.4
10	27.49	35.93	1.3	0.0	0	0.0	0.7
23	27.12	36.26	0.5	0.2	2	0.0	0.3
47	26.62	36.00	0.9	0.0	0	---	0.2
92	25.92	36.08	0.5	0.0	2	0.0	0.2
138	24.38	36.55	0.6	0.0	2	0.2	0.2
182	21.72	36.87	1.8	0.4	6	---	0.1
227	19.33	36.65	1.2	0.4	8	---	0.0
271	---	36.55	1.0	0.4	8	---	0.0
360	16.38	36.26	1.4	0.5	11	0.2	0.2
448	14.44	35.93	3.8	0.9	11	---	0.1
536	12.44	35.62	2.6	1.2	--	0.4	0.2
718	8.71	35.14	3.3	1.7	12	0.0[a]	0.3
905	6.19	34.94	2.9	2.0	24	0.6	0.0
1101	4.95	34.99	4.4	1.9	13	0.3	0.2

(a) Green carbohydrates.

STATION NO. 5-2C-18

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.85	36.00	23.22	0.6	0.0	0	0.0	0.4
10	27.49	35.93	23.28	1.3	0.0	0	0.0	0.7
20	27.24	36.26	23.61	0.7	0.2	2	0.0	0.4
30	26.95	36.13	23.61	0.6	0.2	1	0.0	0.3
50	26.52	36.00	23.65	0.9	0.0	0	0.0	0.2
75	26.18	36.04	23.78	0.7	0.0	1	0.0	0.2
100	25.84	36.10	23.93	0.5	0.0	1	0.0	0.2
150	23.62	36.73	25.09	0.9	0.1	3	0.2	0.2
200	20.75	36.82	25.97	1.6	0.4	7	0.2	0.1
250	18.51	36.59	26.38	1.1	0.4	8	0.2	0.0
300	17.42	36.45	26.55	1.1	0.4	9	0.2	0.1
400	15.60	36.09	26.70	2.5	0.7	11	0.2	0.2
500	13.31	35.75	26.93	3.1	1.1	11	0.4	0.2
600	11.00	35.45	27.14	2.8	1.4	12	0.3	0.2
700	9.05	35.17	27.26	3.2	1.7	12	0.0	0.3
800	7.49	35.04	27.40	3.1	1.8	17	0.3	0.2
1000	5.47	34.95	27.60	3.6	2.0	19	0.5	0.1

STATION NO. 5-2C-19

DATE 29 5 1952 LAT. 23° 30' N. LONG. 85° 00' W.
Day Month Year

TIME 0647 DEPTH 1500 MAX. SAMPLE DEPTH -- WIRE ANGLE 14°
GCT Faths. Meters

WATER COLOR -- WEATHER 01 SEA 1 SWELL -- ° T. -- ft.
Code Code Code Direction Hgt.

-- sec. CLOUDS -- -- TEMP. 81.5 °F. 77.0 °F.
Period Type Amount Dry Wet

BAR. 29.94 in. REL. HUM. 80 % WIND 090 ° T. 2 VIS. --
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.95	36.08	0.6	---	1	0.3	0.2
9	27.96	36.20	0.6	0.0	-	0.0	0.6
23	27.15	*37.18	0.3	0.3	1	---	0.2
48	26.73	36.22	0.4	0.0	1	0.4	0.1
96	25.64	36.17	0.5	0.0	1	0.2	0.1
144	23.18	36.89	1.0	0.2	4	0.5	0.2
193	21.27	36.83	0.7	0.2	4	5.6	0.2
240	19.14	36.62	0.8	0.4	8	0.3	0.0
383	15.88	36.20	1.4	0.8	11	0.6	0.2
478	13.67	35.81	2.0	1.0	18	0.0	0.4
572	11.30	35.39	2.3	1.5	23	0.2	0.2
762	8.18	35.19	2.2	1.9	32	0.2	0.0
952	5.60	35.07	4.2	1.9	27	0.5	0.3
1149	4.78	35.21	3.1	1.7	23	1.2	0.1

*Values not used in drawing smooth curves.

STATION NO. 5-2C-19

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot Mg/l
0	27.95	36.08	23.25	0.6	-	1	0.3	0.2
10	27.96	36.20	23.34	0.6	0.0	1	0.0	0.6
20	27.35	36.22	23.55	0.4	0.2	1	0.1	0.3
30	26.99	36.23	23.67	0.3	0.2	1	0.2	0.2
50	26.65	36.22	23.77	0.4	0.0	1	0.4	0.1
75	26.05	36.18	23.93	0.5	0.0	1	0.3	0.1
100	25.54	36.18	24.09	0.5	0.0	1	0.2	0.1
150	22.92	36.88	25.41	1.0	0.2	4	1.1	0.2
200	21.05	36.80	25.87	0.7	0.2	5	4.8	0.2
250	18.79	36.59	26.31	0.8	0.4	8	0.3	0.0
300	17.49	36.45	26.53	1.1	0.6	9	0.4	0.1
400	15.51	36.15	26.76	1.5	0.8	12	0.5	0.2
500	13.14	35.69	26.92	2.1	1.1	19	0.1	0.4
600	10.71	35.36	27.13	2.3	1.6	24	0.2	0.2
700	9.08	35.25	27.32	2.2	1.8	29	0.2	0.1
800	7.65	35.16	27.47	2.6	1.9	31	0.3	0.1
1000	5.29	35.09	27.73	3.9	1.9	26	0.7	0.2

STATION NO. 5-26-20

DATE 29 5 1952 LAT. 24° 11' N. LONG. 85° 04' W.
Day Month Year

TIME 1250 DEPTH 1800 MAX. SAMPLE DEPTH -- WIRE ANGLE 17 °
GCT 00- Faths. Meters

WATER COLOR 10 WEATHER 01 SEA 0 SWELL -- ° T. -- ft.
Code Code Code Direction Hgt.

-- sec. CLOUDS Cu,Cs 3 TEMP. 81.7 °F. 76.5 °F.
Period Type Amount Dry Wet

BAR. 29.94 in. REL. HUM. 76 % WIND 225 ° T. 1 VIS. --
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	28.18	36.00	0.6	0.0	1	0.0	0.2
9	28.23	35.99	1.1	0.1	0	0.2	0.1
23	27.36	*37.45	1.1	0.0	1	0.1	0.2
47	26.74	36.60	2.0	0.0	0	0.0	0.1
94	24.98	36.42	1.0	0.1	1	0.0	0.2
140	22.01	*37.38	1.4	0.2	4	0.2	0.1
187	19.90	*37.74	1.4	0.3	7	0.1	0.4
232	17.97	*37.45	1.2	0.4	9	0.0	0.2
277	16.56	36.83	1.9	0.5	11	0.4	0.1
365	14.29	36.44	3.0	1.2	14	0.8	0.0
451	12.08	*36.69	2.3	1.3	13	0.0	0.3
535	10.10	36.26	3.3	1.5	23	---	0.0
699	7.66	34.98	2.9	1.9	33	0.4	0.2
859	5.79	34.84	3.2	1.9	30	---	0.4
1019	5.08	34.90	2.8	1.7	26	0.6	0.1
1282	4.36	34.99	3.0	1.5	23	0.4	0.0

*Values not used in drawing smooth curves.

STATION NO. 5-2C-20

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	28.18	36.00	23.11	0.6	0.0	1	0.0	0.2
10	28.22	35.99	23.09	1.1	0.1	0	0.2	0.1
20	27.60	36.23	23.47	1.1	0.0	1	0.1	0.2
30	27.11	36.55	23.87	1.4	0.0	1	0.1	0.2
50	26.62	36.59	24.06	1.9	0.0	0	0.0	0.1
75	25.88	36.47	24.20	1.4	0.1	1	0.0	0.2
100	24.40	36.44	24.64	1.0	0.1	1	0.0	0.2
150	21.54	36.61	25.59	1.4	0.2	5	0.2	0.2
200	19.32	36.75	26.30	1.3	0.3	8	0.1	0.3
250	17.35	36.82	26.85	1.5	0.4	10	0.2	0.2
300	15.95	36.78	27.15	2.2	0.6	12	0.5	0.1
400	13.43	36.25	27.29	2.7	1.2	14	0.5	0.1
500	10.98	35.69	27.34	2.9	1.4	19	0.1	0.1
600	8.92	35.27	27.36	3.1	1.6	27	0.2	0.1
700	7.64	34.97	27.32	2.9	1.9	33	0.4	0.2
800	6.35	34.87	27.43	3.1	1.9	31	0.5	0.3
1000	5.16	34.89	27.59	2.8	1.7	26	0.6	0.1
1200	4.59	34.97	27.72	2.9	1.6	24	0.5	0.0

STATION NO. 5-2C-21

ATE 29 5 1952 LAT. 24° 56' N. LONG. 85° 09' W.
Day Month Year

IME 1846 DEPTH 1800 MAX. SAMPLE DEPTH -- WIRE ANGLE 22 °
GCT Faths. Meters

ATER COLOR 00 WEATHER 01 SEA 0 SWELL 020 ° T. 1 ft.
Code Code Code Direction Hgt.

5 sec. CLOUDS Ci,Cu 2 TEMP. 88.0 °F. 78.4 °F.
eriod Type Amount Dry Wet

AR. 29.91 in. REL. HUM. 64 % WIND 200 ° T. 1 VIS. 9
Direction Force Code

OBSERVED VALUES

epth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.64	36.58	0.7	0.0	0	0.5	0.2
9	26.40	36.51	0.8	2.9	2	0.3	0.5
22	24.13	*36.99	0.8	0.0	1	0.0	0.0
45	23.30	36.56	0.6	0.0	2	0.4	0.2
90	21.20	36.39	0.8	0.0	4	0.4	0.3
134	18.73	36.43	1.1	0.6	8	0.6	1.0
178	17.21	36.58	1.7	0.7	13	---	0.2
221	15.20	35.97	1.6	0.9	14	0.2	0.1
263	13.73	35.86	1.6	1.1	8	0.4	0.1
347	11.34	35.59	2.2	1.5	20	0.3	0.6
430	8.92	*36.51	2.4	1.9	29	0.4	0.7
514	7.68	34.96	2.8	0.2	24	0.6	0.2
678	6.03	34.85	2.8	2.0	16	0.6	0.1
845	5.24	35.59	2.6	1.8	23	0.6	0.2
022	4.64	35.01	3.4	1.6	22	0.6	0.2
312	4.26	34.99	2.5	1.7	5	0.2	1.1

Values not used in drawing smooth curve.

STATION NO. 5-2C-21

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.64	36.58	23.73	0.7	0.0	0	0.5	0.2
10	26.20	36.51	24.13	0.8	2.7	2	0.3	0.5
20	24.75	36.52	24.59	0.8	0.4	1	0.0	0.1
30	23.85	36.55	24.88	0.7	0.0	1	0.1	0.1
50	23.12	36.53	25.08	0.6	0.0	2	0.4	0.2
75	21.90	36.40	25.33	0.7	0.0	3	0.4	0.3
100	20.68	36.39	25.66	0.9	0.1	5	0.4	0.5
150	18.08	36.48	26.40	1.2	0.6	10	0.5	0.7
200	16.22	36.16	26.61	1.6	0.8	14	0.3	0.1
250	14.08	35.90	26.88	1.6	1.0	11	0.3	0.1
300	12.58	35.76	27.09	1.9	1.3	13	0.4	0.4
400	9.70	35.39	27.33	2.3	1.8	26	0.4	0.7
500	7.88	34.99	27.30	2.7	2.2	25	0.6	0.3
600	6.77	34.88	27.38	2.8	2.1	20	0.6	0.1
700	5.88	34.85	27.47	2.8	2.0	17	0.6	0.1
800	5.41	34.92	27.59	2.7	1.9	21	0.6	0.2
1000	4.72	35.01	27.74	3.3	1.6	22	0.6	0.2
1200	4.28	35.00	27.78	2.8	1.7	12	0.4	0.8

STATION NO. 5-2C-22

DATE 29 5 1952 LAT. 25° 33' N. LONG. 85° 07' W.
Day Month Year

TIME 0009 DEPTH 1799 MAX. SAMPLE DEPTH -- WIRE ANGLE 20 °
GCT Faths. Meters

WATER COLOR 00 WEATHER 01 SEA 1 SWELL 270 ° T. 1 ft.
Code Code Code Direction Hgt.

.4 sec. CLOUDS Cu 1 TEMP. 82.1 °F. 77.1 °F.
Period Type Amount Dry Wet

BAR. 29.8 in. REL. HUM. 80 % WIND 250 ° T. 2 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.71	36.35	0.8	0.0	1	1.0	0.6
9	27.07	36.45	0.6	0.0	1	0.1	---
23	24.59	36.81	0.6	0.2	3	0.0	0.1
46	22.23	36.74	1.6	0.3	3	0.6	0.9
94	19.90	36.65	0.9	0.4	7	0.2	0.2
143	16.98	36.22	1.2	0.5	9	0.5	0.0
191	15.65	*36.74	1.4	0.8	-	0.4	0.2
240	14.41	36.27	1.6	0.9	11	0.4	0.1
289	13.01	35.61	2.1	1.3	22	0.0	0.4
387	10.59	35.32	2.2	1.9	--	0.6	0.3
485	8.91	35.07	2.7	1.9	21	---	0.2
583	7.34	34.96	2.8	1.9	29	0.4	0.0
782	5.58	34.95	2.6	1.9	19	0.4	0.4
982	4.76	35.01	2.6	1.6	26	0.5	1.2
1183	4.34	34.99	2.4	1.5	21	0.8	0.2

*Values not used in drawing smooth curves.

STATION NO. 5-2C-22

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot Mg/l
0	27.71	36.35	23.53	0.8	0.0	1	1.0	0.6
10	26.50	36.50	24.03	0.6	0.0	1	0.1	0.4
20	24.60	36.78	24.83	0.6	0.1	3	0.0	0.2
30	23.56	36.80	25.16	0.9	0.2	3	0.2	0.3
50	21.73	36.73	25.63	1.5	0.3	3	0.6	0.8
75	20.52	36.69	25.93	1.2	0.4	5	0.4	0.5
100	19.58	36.57	26.09	0.9	0.4	7	0.2	0.2
150	16.68	36.23	26.55	1.2	0.5	9	0.5	0.0
200	15.46	36.34	26.92	1.4	0.8	10	0.4	0.2
250	14.09	35.91	26.89	1.7	1.0	13	0.3	0.2
300	12.72	35.58	26.92	2.1	1.4	22	0.1	0.4
400	10.31	35.28	27.14	2.3	1.9	21	0.9	0.3
500	8.68	35.05	27.23	2.7	1.9	22	2.6	0.2
600	7.18	34.95	27.38	2.8	1.9	28	0.4	0.0
700	6.18	34.94	27.51	2.7	1.9	23	0.4	0.2
800	5.48	34.95	27.60	2.6	1.9	20	0.4	0.5
1000	4.70	35.01	27.74	2.6	1.6	26	0.5	1.1
1200	(4.34)	(34.99)	27.76	-	-	--	-	-

() Extrapolated values.

STATION NO. 5-2C-23

DATE 30 (Day) 5 (Month) 1952 (Year) LAT. 26° 00' N. LONG. 85° 15' W.

TIME 0451 (GCT) DEPTH 1820 (Faths.) MAX. SAMPLE DEPTH --- (Meters) WIRE ANGLE 7 °

WATER COLOR -- (Code) WEATHER 01 (Code) SEA 2 (Code) SWELL -- (Direction) ° T. -- (Hgt.) ft.

-- (Period) sec. CLOUDS -- (Type) -- (Amount) TEMP. 81.0 (Dry) °F. 76.5 (Wet) °F.

BAR. 29.87 in. REL. HUM. 80 % WIND 180 (Direction) ° T. 2 (Force) VIS. -- (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.15	37.11	0.6	0.0	0	0.0	0.4
10	27.20	37.44	0.6	0.0	2	0.2	0.6
24	24.80	37.23	1.6	0.1	1	0.5	0.3
49	22.96	37.29	1.6	0.0	1	0.2	0.4
98	19.74	36.53	0.8	0.4	7	0.0	0.1
148	16.73	36.60	2.0	0.7	7	0.5	0.0
198	14.91	36.78	1.8	0.9	14	0.0	0.4
248	13.24	35.70	1.7	1.1	17	0.1	0.2
297	11.90	35.46	1.6	1.2	17	0.2	0.0
396	9.77	35.17	2.7	1.5	21	0.9	0.6
495	8.33	35.00	2.9	1.9	17	0.7	---
594	6.96	35.01	2.8	2.0	31	0.8	0.5
789	5.54	34.93	3.4	1.7	27	1.7	0.9
986	4.66	35.01	2.8	1.6	17	1.2	0.3
1185	4.33	34.97	2.5	1.6	13	0.0	0.4
1489	4.24	35.03	1.7	1.5	21	---	0.7

STATION NO. 5-2C-23

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.15	37.11	24.28	0.6	0.0	0	0.0	0.4
10	27.20	37.44	24.51	0.6	0.0	2	0.2	0.6
20	26.10	37.24	24.72	1.3	0.1	1	0.4	0.4
30	24.23	37.24	25.28	1.6	0.1	1	0.5	0.3
50	22.84	36.82	25.38	1.6	0.0	1	0.2	0.4
75	21.09	36.57	25.69	1.2	0.2	4	0.1	0.2
100	19.67	36.53	26.04	0.8	0.4	7	0.0	0.1
150	16.56	36.61	26.87	2.0	0.7	7	0.5	0.0
200	14.80	36.77	27.40	1.8	0.9	14	0.0	0.4
250	13.18	35.66	26.89	1.7	1.0	17	0.1	0.2
300	11.84	35.45	26.99	1.6	1.2	17	0.2	0.0
400	9.70	35.17	27.16	2.7	1.5	21	0.9	0.6
500	8.23	35.00	27.26	2.9	1.9	18	0.7	0.6
600	6.90	35.01	27.46	2.8	2.0	31	0.8	0.5
700	6.10	34.98	27.54	3.1	1.8	29	1.3	0.7
800	5.48	34.93	27.58	3.3	1.7	26	1.7	0.9
1000	4.62	35.01	27.74	2.8	1.6	17	1.1	0.3
1200	4.31	34.97	27.75	2.5	1.6	13	0.1	0.4
1500	(4.23)	(35.04)	27.81	-	-	--	-	-

() Extrapolated values.

STATION NO. 5-2C-24

ATE 30 5 1952 LAT. 26° 00' N. LONG. 84° 41' W.
Day Month Year

IME 1103 DEPTH 600 MAX. SAMPLE DEPTH -- WIRE ANGLE 4 °
GCT Faths. Meters

ATER COLOR -- WEATHER 01 SEA 2 SWELL 220 ° T. 3 ft.
Code Code Code Direction Hgt.

4 sec. CLOUDS Cu 9 TEMP. 80.4 °F. 76.1 °F.
eriod Type Amount Dry Wet

AR. 29.87in. REL. HUM. 83 % WIND 220 ° T. 2 VIS. --
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	28.14	37.10	1.3	0.0	1	1.1	0.0
15	27.15	36.56	0.2	0.0	2	0.4	0.0
40	25.51	36.33	0.8	0.0	1	0.2	0.0
90	21.99	37.00	1.2	0.0	2	0.0	0.0
165	17.86	36.33	1.8	0.6	11	0.2	0.1
239	15.16	*36.73	1.6	0.8	11	---	0.4
289	13.58	35.73	1.9	1.1	--	---	0.3
338	12.34	35.57	2.2	1.6	22	0.2	0.0
388	11.03	35.39	2.2	---	23	0.4	0.2
437	9.44	35.19	2.5	1.8	29	0.0	0.2
537	8.06	*35.62	2.8	1.8	15	0.4	0.0
637	6.73	34.85	3.0	2.0	16	0.4	0.1

*Values not used in drawing smooth curves.

STATION NO. 5-2C-24

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Pro Mg/
0	28.14	37.10	23.95	1.3	0.0	1	1.1	0.(
10	27.65	36.90	23.96	0.6	0.0	2	0.6	0.(
20	26.80	36.47	23.91	0.3	0.0	2	0.4	0.(
30	26.14	36.37	24.05	0.6	0.0	1	0.3	0.(
50	24.85	36.43	24.49	0.9	0.0	1	0.2	0.(
75	22.90	36.99	25.50	1.1	0.0	2	0.1	0.(
100	21.45	36.98	25.90	1.3	0.1	3	0.0	0.(
150	18.65	36.42	26.22	1.7	0.5	9	0.2	0.1
200	16.35	36.06	26.50	1.7	0.7	11	0.6	0.2
250	14.76	35.85	26.70	1.7	0.9	12	1.2	0.1
300	13.29	35.70	26.90	2.0	1.2	18	1.4	0.2
400	10.75	35.33	27.10	2.3	1.7	24	0.3	0.2
500	8.51	35.07	27.27	2.7	1.8	20	0.3	0.1
600	7.21	34.90	27.33	2.9	1.9	16	0.4	0.1

STATION NO. 5-2C-25

DATE 30 5 1952 (Day Month Year) LAT. 26° 00' N. LONG. 83° 43' W.

TIME 1910 (GCT) DEPTH 48 (Faths.) MAX. SAMPLE DEPTH -- (Meters) WIRE ANGLE 10 °

WATER COLOR 10 (Code) WEATHER 03 (Ac) SEA 2 (Code) SWELL 190 (Code) ° T. 3 (Direction) ft. (Hgt.)

5 (Period) sec. CLOUDS Cu (Type) 10 (Amount) TEMP. 82.5 (Dry) °F. 77.0 (Wet) °F.

BAR. 29.86 in. REL. HUM. 80 % WIND 190 (Direction) ° T. 4 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	28.38	36.85	2.5	0.2	1	0.0	0.0
10	28.38	36.35	1.2	0.0	2	0.3	0.0
24	26.79	36.69	2.0	0.0	1	0.2	0.0
49	25.01	36.55	0.7	0.0	3	0.3	0.2
63	22.76	36.80	1.2	0.1	1	0.0	0.3
73	21.95	36.75	0.8	0.1	3	0.3	0.6

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	28.38	36.85	23.68	2.5	0.2	1	0.0	0.0
10	28.38	36.35	23.31	1.2	0.0	2	0.3	0.0
20	27.65	36.48	23.65	1.8	0.0	1	0.2	0.1
30	26.25	36.69	24.25	1.7	0.0	1	0.2	0.1
50	24.90	36.58	24.59	0.7	0.0	2	0.3	0.2
75	(21.90)	(36.73)	25.58	-	-	-	-	-

( ) Extrapolated values.

STATION NO. 5-2C-26

DATE 30 5 1952 (Day Month Year) LAT. 26° 00' N. LONG. 83° 00' W.

TIME 2350 (GCT) DEPTH 22 (Faths.) MAX. SAMPLE DEPTH -- (Meters) WIRE ANGLE 0 °

WATER COLOR 00 (Code) WEATHER 03 (Code) SEA 2 (Code) SWELL 230 (Direction) ° T. 5 (Hgt.) ft.

5 (Period) sec. CLOUDS Cu (Type) 10 (Amount) TEMP. 78.8 (Dry) °F. 74.7 (Wet) °F.

BAR. 29.86 in. REL. HUM. 83 % WIND 230 (Direction) ° T. 1 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.66	35.16	1.0	0.0	2	0.6	0.0
10	25.94	35.97	2.0	0.0	-	0.4	0.5
30	19.92	36.07	1.9	0.2	1	0.3	0.3

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.66	35.16	22.97	1.0	0.0	2	0.6	0.0
10	25.94	35.97	23.81	2.0	0.0	2	0.4	0.5
20	22.85	36.04	23.79	1.9	0.1	1	0.4	0.4
30	19.92	36.07	25.62	1.9	0.2	1	0.3	0.3

STATION NO. 5-2C-27

DATE 31 (Day) 5 (Month) 1952 (Year) LAT. 26° 07' N. LONG. 82° 20' W.

TIME 0422 (GCT) DEPTH 10 (Faths.) MAX. SAMPLE DEPTH -- (Meters) WIRE ANGLE 0 °

WATER COLOR - (Code) WEATHER 02 (Code) SEA 1 (Code) SWELL -- (Direction) ° T. - (Hgt.) ft.

-- (Period) sec. CLOUDS -- (Type) -- (Amount) TEMP. 79.0 (Dry) °F. 75.0 (Wet) °F.

BAR. 29.85 in. REL. HUM. 83 % WIND 220 (Direction) ° T. 1 (Force) VIS. -- (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.73	37.43	2.2	0.1	1	0.0	0.3
15	25.14	36.17	1.2	0.1	1	0.4	1.2

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.73	37.43	24.66	2.2	0.1	1	0.0	0.3
10	25.85	36.45	24.20	1.5	0.1	1	0.3	0.9

STATION NO. 5-2C-28

DATE 31 5 1952 LAT. 26° 34' N. LONG. 82° 36' W.
Day Month Year

TIME 0809 DEPTH 12 MAX. SAMPLE DEPTH -- WIRE ANGLE 0 °
GCT Faths. Meters

WATER COLOR -- WEATHER 03 SEA 2 SWELL -- ° T. - ft.
Code Code Code Direction Hgt.

-- sec. CLOUDS -- -- TEMP. 78.2 °F. 72.8 °F.
Period Type Amount Dry Wet

BAR. 29.83 in. REL. HUM. 79 % WIND 170 ° T. 2 VIS. --
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.67	36.22	1.0	0.0	2	-	0.3
10	26.68	36.12	0.8	0.0	2	0.7	0.5
20	25.15	35.94	1.9	0.0	2	0.1	0.3

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.67	36.22	23.76	1.0	0.0	2	-	0.3
10	26.68	36.12	23.69	0.8	0.0	2	0.7	0.5
20	25.15	35.94	24.02	1.9	0.0	2	0.1	0.3

STATION NO. 5-2C-29

DATE 31 5 1952 LAT. 27° 12' N. LONG. 82° 43' W.
Day Month Year

TIME 1229 DEPTH 7 MAX. SAMPLE DEPTH -- WIRE ANGLE 0 °
GCT Faths. Meters

WATER COLOR 20 WEATHER 01 SEA 1 SWELL 180 ° T. 3 ft.
Code Code Code Direction Hgt.

6 sec. CLOUDS Cu 1 TEMP. 81.0 °F. 77.0 °F.
Period Type Amount Dry Wet

BAR. 29.96 in. REL. HUM. 84 % WIND 190 ° T. 2 VIS. 8
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.18	35.52	1.1	0.0	1	0.0	0.7
7	27.17	36.80	1.1	0.0	0	0.2	0.3

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.18	35.52	23.08	1.1	0.0	1	0.0	0.7

STATION NO. 5-2C-30

DATE 1 6 1952 (Day Month Year) LAT. 27° 24' N. LONG. 83° 26' W.

TIME 1011 (GCT) DEPTH 22 (Faths.) MAX. SAMPLE DEPTH 42 (Meters) WIRE ANGLE 0 °

WATER COLOR 00 (Code) WEATHER 01 (Code) SEA 0 (Code) SWELL -- (Direction) ° T. - ft (Hgt.)

-- sec. (Period) CLOUDS Cu (Type) 1 (Amount) TEMP. 78.2 °F. (Dry) 73.5 °F (Wet)

BAR. 29.88 in. REL. HUM. 83 % WIND 315 ° T. (Direction) 1 (Force) VIS 9 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot Mg/l
0	26.37	34.83	0.8	0.0	2	0.6	0.5
20	21.83	35.62	0.4	0.1	2	1.2	1.2
35	19.66	36.31	0.6	0.5	3	0.2	0.7

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Pro Mg/
0	26.37	34.83	22.81	0.8	0.0	2	0.6	0.
10	25.50	35.25	23.40	0.6	0.1	2	0.9	0.
20	21.83	35.62	24.76	0.4	0.1	2	1.2	1.
30	20.31	36.10	25.54	0.5	0.5	3	0.5	0.

STATION NO. 5-2C-31

DATE 1 6 1952 LAT. 27° 17' N. LONG. 84° 11' W.
Day Month Year

TIME 1517 DEPTH 45 MAX. SAMPLE DEPTH -- WIRE ANGLE 0 °
GCT Faths. Meters

WATER COLOR -- WEATHER 01 SEA 0 SWELL 150 ° T. 1 ft.
Code Cc Code Code Direction Hgt.

5 SEC. CLOUDS As 3 TEMP. 79.8 °F. 75.0 °F.
Period Type Amount Dry. Wet

BAR. 29.94 in. REL. HUM. 79 % WIND 330 ° T. 1 VIS 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.42	33.24	0.4	0.1	0	0.4	1.2
10	25.80	34.69	0.4	0.0	0	0.4	1.4
25	22.80	36.35	0.3	0.1	3	0.2	0.5
50	19.19	36.29	1.0	0.2	3	-	0.2

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.42	33.24	21.60	0.4	0.1	0	0.4	1.2
10	25.80	34.69	22.88	0.4	0.0	0	0.4	1.4
20	23.75	35.85	24.38	0.3	0.1	2	0.3	0.8
30	22.12	36.35	25.23	0.4	0.1	3	0.5	0.4
50	19.19	36.29	25.98	1.0	0.2	3	1.7	0.2

STATION NO. 5-20-32

DATE 1 6 1952 LAT. 27° 08' N. LONG. 85° 07' W.
Day Month Year
TIME 2251 DEPTH 530 MAX. SAMPLE DEPTH -- WIRE ANGLE 5 °
GCT 00- Faths. Meters
WATER COLOR 10 WEATHER 01 SEA 0 SWELL -- ° T. -- ft.
Code Code Code Direction Hgt.
-- sec. CLOUDS Cc,Ac,Ci 3 TEMP. 84.7 °F. 75.7 °F.
Period Type Amount Dry Wet
BAR. 29.91 in. REL. HUM. 66% WIND -- ° T. 0 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	28.28	36.24	1.0	0.0	0	0.5	0.2
10	27.67	36.10	0.8	0.1	0	0.6	0.1
25	26.94	36.05	0.4	0.0	9	0.5	0.6
50	26.32	36.27	0.3	0.0	0	0.2	0.9
100	22.04	36.71	0.8	0.2	3	0.6	0.2
149	19.44	36.62	---	---	7	0.0	0.6
198	17.95	36.40	1.0	0.5	-	0.1[a]	---
247	16.49	---	0.9	0.6	11	0.0	0.4
297	14.95	36.06	1.3	0.8	8	0.4	0.0
346	13.48	35.75	1.6	1.1	14	0.0	0.2
395	11.95	35.53	1.8	1.3	17	0.5	0.5
444	10.96	35.37	2.2	1.5	18	0.8[a]	0.8
494	9.79	35.25	2.1	1.9	14	1.0	0.2
593	8.11	35.03	2.4	2.0	21	0.9	0.7
693	6.79	34.93	3.2	2.0	29	0.2	0.0
793	5.95	34.92	2.9	1.8	19	0.2	0.2

(a) Green carbohydrates.

STATION NO. 5-2C-32

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	28.28	36.24	23.26	1.0	0.0	0	0.5	0.2
10	27.67	36.10	23.36	0.8	0.1	0	0.6	0.1
20	27.17	36.05	23.48	0.5	0.0	3	0.5	0.4
30	26.88	36.06	23.58	0.4	0.0	3	0.4	0.7
50	26.32	36.27	23.92	0.3	0.0	0	0.2	0.9
75	24.85	36.64	24.65	0.6	0.1	2	0.4	0.8
100	22.04	36.71	25.53	0.8	0.2	3	0.6	0.7
150	19.42	36.60	26.16	0.9	0.4	7	0.0	0.6
200	17.89	36.39	26.38	1.0	0.5	9	0.1	0.5
250	16.43	36.23	26.61	0.9	0.6	11	0.0	0.4
300	14.91	36.00	26.78	1.3	0.7	8	0.4	0.0
400	11.90	35.51	27.03	1.8	1.3	17	0.5	0.5
500	9.78	35.24	27.20	2.1	1.9	14	1.0	0.8
600	8.05	35.02	27.30	2.5	2.0	22	0.9	0.7
700	6.71	34.93	27.42	3.2	2.0	28	0.2	0.0
800	(5.93)	(34.92)	27.51	-	1.8	--	-	-

() Extrapolated values.

STATION NO. 5-2C-33

DATE 2 6 1952 LAT. 27° 05' N. LONG. 85° 40' W.
Day Month Year

TIME 0357 DEPTH 1760 MAX. SAMPLE DEPTH -- WIRE ANGLE 35°
GCT Faths. Meters

WATER COLOR -- WEATHER 01 SEA 0 SWELL -- ° T. -- ft.
Code Code Code Direction Hgt.

-- sec. CLOUDS C_{11} 4 TEMP. 80.1 °F. 74.8 °F.
Period Type Amount Dry Wet

BAR. 29.95 in. REL. HUM. 79 % WIND 025 ° T. 1 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.62	36.13	0.8	0.0	0	0.2	0.5
8	27.66	36.13	0.4	0.1	0	0.1	0.2
20	27.13	36.09	0.4	0.0	1	0.5	0.2
40	25.80	---	0.6	0.9**	0	0.4	0.6
76	22.51	36.63	0.8	0.2	2	2.7	0.1
113	20.41	36.70	0.8	0.4	4	---	0.0
149	19.10	36.65	0.6	0.3	2	0.0	0.6
184	17.90	36.42	0.8	0.5	7	0.0[a]	1.2
217	16.52	36.20	1.7	0.7	9	0.0	0.0
280	13.94	35.78	1.6	1.1	11	0.2	0.5
341	12.23	35.52	2.4	1.7	15	0.3	0.0
400	10.83	35.43	2.2	1.4	22	0.3	0.0
518	8.38	35.07	2.6	2.4	26	1.2	0.0
641	6.96	34.97	2.8	2.0	21	0.4	0.5
774	5.74	34.97	2.8	1.9	21	0.4	0.7
1013	4.76	34.91	---	1.7	19	0.0	0.4

** Possibly contaminated.
(a) Green carbohydrates.

STATION NO. 5-2C-33

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.62	36.13	23.40	0.8	0.0	0	0.2	0.5
10	27.63	36.12	23.38	0.4	0.1	0	0.2	0.2
20	27.13	36.09	23.52	0.4	0.0	1	0.5	0.2
30	26.33	36.11	23.79	0.5	0.0	1	0.5	0.4
50	24.72	36.26	24.40	0.7	0.1	1	1.0	0.5
75	22.52	36.63	25.33	0.8	0.2	2	2.6	0.1
100	21.00	36.69	25.80	0.8	0.3	3	1.8	0.0
150	19.03	36.64	26.29	0.6	0.3	2	0.0	0.6
200	17.22	36.30	26.48	1.2	0.6	8	0.0	0.6
250	15.08	35.97	26.72	1.7	0.9	10	0.1	0.3
300	13.34	35.65	26.85	1.9	1.3	12	0.2	0.3
400	10.83	35.43	27.16	2.2	1.4	22	0.3	0.0
500	8.65	35.10	27.27	2.5	2.2	25	1.1	0.0
600	7.37	34.99	27.38	2.7	2.1	22	0.7	0.3
700	6.37	34.97	27.50	2.8	2.0	21	0.4	0.6
800	5.56	34.97	27.60	-	1.9	21	0.4	0.7
1000	4.78	34.91	27.65	-	1.7	19	0.0	0.4

STATION NO. 5-2C-34

DATE 2 6 1952 (Day Month Year) LAT. 27° 28' N. LONG. 85° 23' W.

TIME 0908 (GCT) DEPTH 400 (Faths.) MAX. SAMPLE DEPTH -- (Meters) WIRE ANGLE 0 °

WATER COLOR 00 (Code) WEATHER 01 (Code) SEA 1 (Code) SWELL -- (Direction) ° T. -- (Hgt.) ft.

-- (Period) sec. CLOUDS -- (Type) -- (Amount) TEMP. 79.3 (Dry) °F. 74.6 (Wet) °F.

BAR. 29.92 in. REL. HUM. 83 % WIND 030 (Direction) ° T. 1 (Force) VIS. 9 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.32	36.40	---	0.0	17	0.4	0.0
10	27.18	*37.30	1.9	0.0	0	0.0	0.0
25	24.81	36.44	1.2	0.0	0	0.0	0.6
50	22.49	36.36	0.8	0.2	3	---	0.6
100	19.45	*37.65	1.7	0.4	6	0.7	0.8
150	16.70	36.24	1.5	0.7	11	0.2	0.2
200	15.10	*36.94	1.6	0.9	9	0.2	0.3
250	13.65	35.82	1.9	1.1	14	0.5	0.4
300	12.52	*36.24	2.0	1.3	16	---	0.2
400	10.33	35.24	2.4	1.4	20	0.0[a]	1.5
500	8.64	35.08	2.8	1.9	19	0.6	0.0
600	7.16	---	3.0	2.0	30	0.0	0.0

*Values not used in drawing smooth curves.
(a) Green carbohydrates.

STATION NO. 5-2C-34

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.32	36.40	23.69	-	0.0	17	0.4	0.0
10	27.18	36.42	23.75	1.9	0.0	0	0.0	0.0
20	25.60	36.44	24.27	1.4	0.0	0	0.0	0.4
30	24.40	36.44	24.64	1.1	0.0	1	0.0	0.6
50	22.49	36.36	25.14	0.8	0.2	3	0.2	0.6
75	20.85	36.31	25.56	1.0	0.3	5	0.5	0.7
100	19.45	36.28	25.90	1.1	0.4	6	0.7	0.8
150	16.70	36.24	26.56	1.5	0.7	11	0.2	0.2
200	15.10	36.05	26.78	1.6	0.9	9	0.2	0.3
250	13.65	35.82	26.92	1.9	1.1	14	0.5	0.4
300	12.52	35.59	26.97	2.0	1.3	16	0.3	0.2
400	10.33	35.24	27.10	2.4	1.4	20	0.0	1.5
500	8.64	35.08	27.25	2.8	1.9	19	0.6	0.0
600	7.16	---	---	3.0	2.0	30	0.0	0.0

STATION NO. 5-2C-35

DATE 2 6 1952 LAT. 28° 07' N. LONG. 85° 50' W.
Day Month Year

TIME 1426 DEPTH 64 MAX. SAMPLE DEPTH -- WIRE ANGLE 6 °
GCT Faths. Meters

WATER COLOR -- WEATHER 01 SEA 1 SWELL -- ° T. -- ft
Code Code Code Direction Hgt.

-- sec. CLOUDS Cu 1 TEMP. 80.9 °F. 76.7 °F
Period Type Amount Dry Wet

BAR. 29.96 in. REL. HUM. 84 % WIND 020 ° T. 2 VIS. 9
Direction Force Cod

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot Mg/l
0	26.57	---	1.0	0.1	1	-	0.2
10	24.82	36.17	0.8	0.0	2	1.0	0.4
25	23.88	36.40	2.2	0.1	0	0.4	0.6
50	21.74	36.37	0.9	0.0	1	0.4	0.4
74	20.48	36.64	1.3	0.5	5	0.4	0.0
99	19.36	36.60	1.3	0.5	6	0.3	0.4

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot Mg/l
0	26.57	(36.11)	23.72	1.0	0.1	1	-	0.2
10	24.82	36.17	24.31	0.8	0.0	2	1.0	0.4
20	24.08	36.39	24.69	1.7	0.0	1	0.6	0.5
30	23.60	36.39	24.84	1.9	0:0	0	0.4	0.6
50	21.74	36.37	25.36	0.9	0.0	1	0.4	0.4
75	20.47	36.64	25.91	1.3	0.5	5	0.4	0.0
100	(19.36)	(36.60)	26.17	-	-	-	-	-

() Extrapolated values.

STATION NO. 5-2C-36

ATE 2 6 1952 LAT. 28° 30' N. LONG. 84° 32' W.
Day Month Year

IME 1901 DEPTH 29 MAX. SAMPLE DEPTH -- WIRE ANGLE 0 °
GCT Faths. Meters

ATER COLOR - WEATHER 00 SEA 1 SWELL -- ° T. -- ft.
Code Code Code Direction Hgt.

-- sec. CLOUDS -- 0 TEMP. 84.0 °F. 77.3 °F.
eriod Type Amount Dry Wet

AR. 29.94 in. REL. HUM. 73 % WIND 060 ° T. 1 VIS. 9
Direction Force Code

OBSERVED VALUES

epth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.40	33.42	7.3	0.7	0	3.6	1.4
2	27.03	34.94	2.0	0.1	1	0.6	0.4
7	25.18	34.43	0.8	0.0	0	0.1	0.0
12	22.01	35.82	1.2	0.0	1	-	0.5
17	19.88	36.15	0.6	0.1	-	0.0	0.6
22	19.09	36.18	0.7	0.1	1	1.0	0.4
27	18.35	36.22	1.0	0.0	1	0.2	0.4
32	17.64	36.22	1.0	0.2	2	0.3	0.8
42	16.44	36.11	2.1	0.9	9	-	1.4
52	16.40	---	2.1	0.9	8	0.4	0.2

VALUES AT STANDARD DEPTHS

)epth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.40	33.42	21.42	7.3	0.7	0	3.6	1.4
10	23.00	35.29	24.18	1.0	0.0	1	0.1	0.3
20	19.40	36.17	25.83	0.7	0.1	1	0.6	0.5
30	17.80	36.22	26.27	1.0	0.1	1	0.3	0.6
50	16.41	---	---	2.1	0.9	8	0.4	0.4

STATION NO. 5-2C-36A

DATE 2 6 1952 LAT. 28° 30' N. LONG. 84° 32'
Day Month Year
TIME 1943 DEPTH 28 MAX. SAMPLE DEPTH -- WIRE ANGLE 0
GCT Faths. Meters
WATER COLOR -- WEATHER 00 SEA 1 SWELL -- ° T. -
Code Code Code Direction Hgt.
-- sec. CLOUDS -- 0 TEMP. 84.0 °F. 77.3
Period Type Amount Dry Wet
BAR. 29.94 in. REL. HUM. 73 % WIND 060 ° T. 1 VIS. 9
Direction Force Co

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Pro Mg/
0	27.19	33.48	1.0	0.0	1	0.0	0.
10	23.99	35.34	1.3	0.1	0	-	0.
25	18.87	36.20	0.9	0.2	1	0.5	0.
35	17.44	36.20	1.4	0.3	5	0.4	0.
45	16.42	36.09	1.8	0.8	11	0.0a	0.

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	P M
0	27.19	33.48	21.54	1.0	0.0	1	0.0	
10	23.99	35.34	23.92	1.3	0.1	0	0.2	
20	20.40	36.18	25.57	1.0	0.1	1	0.4	
30	18.20	36.20	26.16	1.2	0.2	3	0.5	

(a) Green carbohydrates.

STATION NO. 5-2C-37

DATE 3 6 1952 LAT. 29° 19' N. LONG. 84° 02' W.
Day Month Year

TIME 0324 DEPTH 10 MAX. SAMPLE DEPTH -- WIRE ANGLE 0 °
GCT Faths. Meters

WATER COLOR -- WEATHER 01 SEA 1 SWELL -- ° T. -- ft.
Code Code Code Direction Hgt.

- sec. CLOUDS Ac 1 TEMP. 86.1 °F. 76.5 °F.
Period Type Amount Dry Wet

BAR. 29.94 in. REL. HUM. 80% WIND 290 ° T. 1 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.39	34.94	0.9	0.1	4	0.4	0.5
5	23.68	35.33	0.8	0.1	0	0.0	-
15	22.84	35.73	0.8	0.1	0	0.0	0.0

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.39	34.94	22.57	0.9	0.1	4	0.4	0.5
10	23.26	35.53	24.28	0.8	0.1	0	0.0	0.2

STATION NO. 5-2C-38

DATE 3 (Day) 6 (Month) 1952 (Year) LAT. 29° 15' N. LONG. 84° 46' W.

TIME 0830 (GCT) DEPTH 28 (Faths.) MAX. SAMPLE DEPTH -- (Meters) WIRE ANGLE 0 °

WATER COLOR -- (Code) WEATHER -- (Code) SEA 1 (Code) SWELL -- (Direction) ° T. - (Hgt.) f

-- (Period) sec. CLOUDS -- (Type) -- (Amount) TEMP. 80.1 (Dry) °F 76.4 (Wet) °

BAR. 29.91 in. REL. HUM. 83 % WIND 280 (Direction) ° T. 1 (Force) VIS. -- (Cod

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Pro Mg/
0	26.99	35.47	0.0	0.0	-	0.4	0.
12	24.04	35.70	0.5	0.0	1	1.3	0.
27	20.09	36.20	0.8	0.2	1	0.3	0.

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Pr Mg
0	26.99	35.47	23.10	0.0	0.0	-	0.4	(
10	24.50	35.63	23.99	0.4	0.0	-	1.1	(
20	21.80	35.95	25.02	0.7	0.1	1	0.8	(

STATION NO. 5-2C-39

DATE 3 6 1952 LAT. 28° 54' N. LONG. 85° 25' W.
Day Month Year

TIME 1307 DEPTH 50 MAX. SAMPLE DEPTH 39 WIRE ANGLE 7 °
GCT Faths. Meters

WATER COLOR -- WEATHER 01 SEA 0 SWELL --- ° T. -- ft.
Code Code Code Direction Hgt.

-- sec. CLOUDS As 1 TEMP. 86.0 °F. 77.8 °F.
Period Type Amount Dry Wet

BAR. 29.96 in. REL. HUM. 70 % WIND -- ° T. 0 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.75	33.35	0.6	0.0	0	-	0.4
10	24.46	34.45	1.0	0.1	1	1.1	0.0
25	22.40	36.15	0.0	0.0	2	0.5	0.0
50	20.63	36.20	0.0	0.0	1	0.2	0.1
75	19.39	36.34	1.5	0.4	5	0.2	0.6

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.75	33.35	21.57	0.6	0.0	0	-	0.4
10	24.46	34.45	23.11	1.0	0.1	1	1.1	0.0
20	23.25	35.58	24.32	0.3	0.0	2	0.7	0.0
30	22.00	36.17	25.13	0.0	0.0	2	0.4	0.0
50	20.63	36.20	25.53	0.0	0.0	1	0.2	0.1
75	19.39	36.34	25.97	1.5	0.4	5	0.2	0.6

STATION NO: 5-2C-40

DATE 3 (Day) 6 (Month) 1952 (Year) LAT. 28° 33' N. LONG. 86° 06' W.

TIME 1829 (GCT) DEPTH 175 (Faths.) MAX. SAMPLE DEPTH -- (Meters) WIRE ANGLE 7 °

WATER COLOR 10 (Code) WEATHER 01 (Code) SEA 0 (Code) SWELL -- (Direction) ° T. -- (Hgt.) ft.

-- (Period) sec. CLOUDS Ci (Type) 9 (Amount) TEMP. 81.3 (Dry) °F. 76.6 (Wet) °F.

BAR. 29.96 in. REL. HUM. 84 % WIND -- (Direction) ° T. 0 (Force) VIS. 9 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot Mg/l
0	27.00	33.96	0.6	0.1	1	0.6	0.1
10	24.99	34.99	1.0	0.0	2	0.4	-
24	22.79	36.36	0.6	0.0	2	-	0.0
49	21.75	---	0.6	0.0	1	0.3	0.2
98	19.72	36.49	0.9	0.3	8	0.4	0.2
147	17.59	36.54	1.0	0.7	10	0.2	0.0
197	15.56	36.08	1.3	0.8	14	-	0.3
247	13.96	35.84	1.8	1.1	--	0.0	0.1

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Pro Mg/
0	27.00	33.96	21.96	0.6	0.0	1	0.6	0.
10	24.99	34.99	23.36	1.0	0.0	2	0.4	0.
20	22.92	35.91	24.67	0.7	0.0	2	0.4	0.
30	22.50	36.38	25.15	0.6	0.0	2	0.3	0.
50	21.68	36.43	25.42	0.6	0.0	1	0.3	0.
75	20.53	36.47	25.76	0.8	0.2	5	0.4	0.
100	19.60	36.49	26.02	0.9	0.3	8	0.4	0.
150	17.40	36.53	26.61	1.0	0.7	10	0.2	0.
200	15.45	36.05	26.70	1.3	0.8	14	0.1	0.
250	(13.90)	(35.84)	26.88	-	-	--	-	-

() Extrapolated values.

STATION NO. 5-2C-41

DATE 3 6 1952 LAT. 28° 48' N. LONG. 86° 51' W.
Day Month Year

TIME 2335 DEPTH 320 MAX. SAMPLE DEPTH -- WIRE ANGLE 10 °
GCT Faths. Meters

WATER COLOR 10 WEATHER 01 SEA 1 SWELL 290 ° T. 2 ft.
Code Code Code Direction Hgt.

5 sec. CLOUDS As 1 TEMP. 81.8 °F. 74.8 °F.
Period Type Amount Dry Wet

BAR. 29.96 in. REL. HUM. 73 % WIND 290 ° T. 1 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.83	34.02	1.0	0.0	0	0.1	0.0
10	25.11	35.37	0.7	0.0	1	0.3	0.0
25	23.43	36.09	0.5	0.0	1	2.0	0.2
49	22.32	36.24	0.6	0.0	1	0.3	---
98	20.22	36.44	1.0	0.4	5	0.2	0.0
147	17.18	36.36	1.4	0.6	12	0.2	0.1
196	---	36.06	2.0	0.8	8	0.8	0.1
244	13.56	35.70	1.6	1.1	20	0.7	0.3
293	12.15	35.53	2.2	1.4	23	0.2	0.1
342	10.92	35.41	2.2	1.5	26	0.0	0.0
440	9.09	35.16	2.8	1.8	31	0.2	0.1
490	8.12	35.01	2.7	1.9	30	0.4	0.2

STATION NO. 5-2C-41

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Pro Mg/
0	26.83	34.02	22.06	1.0	0.0	0	0.1	0.
10	25.11	35.37	23.61	0.7	0.0	1	0.3	0.
20	23.65	35.81	24.38	0.6	0.0	1	1.4	0.
30	23.05	36.18	24.84	0.5	0.0	1	1.6	0.
50	22.19	36.30	25.18	0.6	0.0	1	0.3	0.
75	21.05	36.40	25.57	1.0	0.4	5	0.2	0.
100	20.12	36.44	25.85	1.4	0.6	12	0.2	0.
150	17.00	36.34	26.56	2.0	0.8	9	0.8	0.
200	15.10	35.97	26.72	1.7	1.1	20	0.7	0.
250	13.39	35.66	26.84	2.2	1.4	23	0.2	0.
300	11.99	35.51	27.01	2.3	1.5	27	0.0	0.
400	9.77	35.27	27.22	2.7	1.9	30	0.3	0.
500	(8.01)	(35.00)	27.29	-	-	--	-	-

() Extrapolated values.

STATION NO. 5-2C-42

DATE 4 6 1952 LAT. 28° 50 N. LONG. 87° 30 W.
Day Month Year

TIME 0445 DEPTH 860 MAX. SAMPLE DEPTH -- WIRE ANGLE 4 °
GCT Faths. Meters

WATER COLOR 10 WEATHER 03 SEA 1 SWELL --- ° T. --- ft.
Code Code Code Direction Hgt.

--- sec. CLOUDS Ci,Cu 10 TEMP. 80.6 °F. 72.3 °F.
Period Type Amount Dry Wet

BAR. 29.98 in. REL. HUM. 65 % WIND 330 ° T. 2 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.93	35.23	1.5	---	-	---	---
10	25.67	35.77	1.0	0.0	1	0.6	0.0
25	23.81	36.32	0.8	0.0	1	0.1	0.0
50	22.20	36.29	1.0	0.0	0	0.2	0.3
99	20.08	36.45	0.8	0.3	5	0.8	0.4
149	17.29	36.33	1.4	0.7	7	---	0.0
198	15.67	36.09	1.7	0.8	15	---	0.2
248	14.31	35.84	1.6	1.0	19	0.0	0.0
298	12.98	35.71	1.8	1.2	18	0.1	0.0
397	10.78	35.34	2.5	1.6	24	0.2	0.2
497	8.12	34.96	2.8	2.5	28	0.2	1.4
596	6.46	34.94	3.2	2.0	32	0.0	0.2
795	5.37	34.94	2.6	1.8	24	---	0.7
1094	4.54	34.97	2.3	1.6	25	0.2	0.0
1493	4.26	35.01	---	1.5	22	0.6[a]	0.0

(a) Green carbohydrates.

STATION NO. 5-2C-42

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Pro Mg/
0	26.93	35.23	22.93	1.5	-	-	-	-
10	25.67	35.77	23.74	1.0	0.0	1	0.6	0.
20	24.15	36.15	24.49	0.9	0.0	1	0.3	0.
30	23.40	36.31	24.84	0.8	0.0	1	0.1	0.
50	22.20	36.29	25.18	1.0	0.0	0	0.2	0.
75	21.15	36.39	25.53	0.9	0.2	3	0.5	0.
100	20.08	36.45	25.86	0.8	0.3	5	0.8	0.
150	17.28	36.32	26.48	1.4	0.7	7	0.5	0.
200	15.60	36.08	26.69	1.7	0.8	15	0.3	0.
250	14.27	35.83	26.79	1.6	1.0	19	0.0	0.
300	12.98	35.70	26.96	1.8	1.2	18	0.1	0.
400	10.71	35.33	27.11	2.5	1.6	24	0.2	0.
500	8.05	34.96	27.25	2.8	2.5	28	0.2	1.
600	6.40	34.94	27.47	3.2	2.0	32	0.0	0.
700	5.74	34.94	27.55	2.9	1.9	28	0.0	0.
800	5.35	34.94	27.60	2.6	1.8	24	0.1	0.
1000	4.79	34.96	27.69	2.4	1.7	25	0.2	0.
1200	4.35	34.98	27.76	-	1.6	24	0.3	0.
1500	(4.26)	(35.01)	27.79	-	-	--	-	-

() Extrapolated values.

STATION NO. 5-2C-43

DATE 4 6 1952 LAT. 28° 44' N. LONG. 88° 12' W.
Day Month Year

TIME 1201 DEPTH 960 MAX. SAMPLE DEPTH -- WIRE ANGLE 6 °
GCT Faths. Meters

WATER COLOR -- WEATHER 01 SEA 0 SWELL -- ° T. 0 ft.
Code Code Code Direction Hgt.

-- sec. CLOUDS Ci,As 2 TEMP. 80.9 °F. 73.0 °F.
Period Type Amount Dry Wet

BAR. 29.95 in. REL. HUM. 68 % WIND -- ° T. 0 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.32	36.02	2.8	0.0	1	0.4	0.4
10	25.87	36.09	0.4	0.0	1	0.0	0.4
25	24.17	36.26	0.6	0.0	-	0.0	0.3
50	23.44	36.26	0.6	0.0	1	---	0.0
99	22.53	36.42	0.2	0.1	1	0.0	0.4
148	20.34	36.71	0.8	0.3	5	---	1.3
198	17.94	36.49	1.1	0.5	6	0.4	---
297	15.29	35.98	1.2	0.9	8	0.6	0.1
396	11.92	35.50	1.8	1.5	13	0.2	0.0
495	9.85	35.17	2.4	1.7	24	1.2[a]	0.4
594	7.99	35.01	2.2	1.8	17	0.0	0.1
792	5.91	34.96	2.8	1.9	--	0.6[a]	0.6
990	5.04	34.96	2.0	1.9	19	0.3	0.5
1190	4.51	34.99	3.2	1.5	13	0.2	0.2
1486	4.22	34.98	2.0	1.4	12	1.0	0.1

(a) Green carbohydrates.

STATION NO. 5-2C-43

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	O_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.32	36.02	23.73	2.8	0.0	1	0.4	0.1
10	25.87	36.09	23.92	0.4	0.0	1	0.0	0.1
20	24.75	36.25	24.39	0.5	0.0	1	0.0	0.1
30	23.90	36.26	24.65	0.6	0.0	1	0.0	0.2
50	23.44	36.26	24.79	0.6	0.0	1	0.0	0.0
75	22.95	36.30	24.96	0.4	0.0	1	0.0	0.2
100	22.49	36.45	25.20	0.2	0.0	1	0.0	0.1
150	20.26	36.71	26.02	0.8	0.3	5	0.2	1.1
200	17.88	36.46	26.44	1.1	0.5	6	0.4	0.0
250	16.55	36.20	26.56	1.2	0.7	7	0.5	0.5
300	15.20	35.96	26.68	1.2	0.9	8	0.6	0.1
400	11.81	35.49	27.03	1.8	1.5	13	0.2	0.1
500	9.79	35.16	27.13	2.4	1.7	24	1.1	0.4
600	7.91	35.00	27.31	2.2	1.8	17	0.0	0.
700	6.72	34.97	27.45	2.5	1.9	18	0.3	0.4
800	5.88	34.96	27.55	2.7	1.9	18	0.6	0.
1000	5.01	34.96	27.66	2.1	1.9	19	0.3	0.
1200	4.49	34.99	27.75	3.2	1.5	13	0.2	0.
1500	(4.20)	(34.98)	27.77	-	-	--	-	-

() Extrapolated values.

STATION NO. 5-2C-44

DATE 4 6 1952 LAT. 28° 35' N. LONG. 89° 00' W.
Day Month Year

TIME 1820 DEPTH 440 MAX. SAMPLE DEPTH -- WIRE ANGLE 4 °
GCT Faths. Meters

WATER COLOR 10 WEATHER 01 SEA 0 SWELL -- ° T. 0 ft.
Code Code Code Direction Hgt.

-- sec. CLOUDS Ci,Cs 3 TEMP. 83.6 °F. 73.3 °F.
Period Type Amount Dry Wet

BAR. 30.01 in. REL. HUM. 59 % WIND -- ° T. 0 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	27.75	32.00	0.3	0.0	2	0.0	0.1
10	24.99	34.89	0.6	0.1	1	0.4	0.0
25	24.13	36.58	0.3	0.0	1	0.0	0.0
50	23.40	36.44	0.4	0.0	1	0.3	0.0
99	22.47	36.51	0.4	0.1	2	0.4	0.6
147	20.15	36.73	0.5	0.3	6	0.4	0.1
196	18.08	36.44	1.1	0.4	9	0.0	0.0
245	16.66	36.26	1.0	0.6	7	0.6	0.0
294	14.94	36.16	1.0	0.9	11	0.4	0.2
393	11.94	35.84	2.0	1.4	16	---	0.4
492	9.65	*35.90	1.8	1.7	21	2.1	0.2
592	7.82	35.03	2.2	1.9	9	---	0.4
692	6.42	*35.39	2.1	1.9	12	0.0	1.1

*Values not used in drawing smooth curves.

STATION NO. 5-2C-44

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Pro Mg/
0	27.75	32.00	20.24	0.3	0.0	2	0.0	0.
10	24.99	35.89	24.04	0.6	0.1	1	0.4	0.
20	24.31	36.57	24.76	0.4	0.0	1	0.1	0.
30	23.98	36.57	24.86	0.3	0.0	1	0.1	0.
50	23.40	36.44	24.93	0.4	0.0	1	0.3	1.
75	22.95	36.47	25.09	0.4	0.0	2	0.4	0.
100	22.46	36.51	25.26	0.4	0.1	2	0.4	0.
150	20.00	36.73	26.11	0.5	0.3	6	0.4	0.
200	17.99	36.43	26.39	1.1	0.4	9	0.0	0.
250	16.55	36.26	26.61	1.0	0.6	7	0.6	0.
300	14.72	36.14	26.93	1.1	0.9	11	0.5	0.
400	11.79	35.81	27.28	2.0	1.4	16	1.3	0.
500	9.54	35.29	27.27	1.8	1.7	20	2.0	0.
600	7.71	(35.03)	27.36	2.2	1.9	9	1.0	0.
700	(6.36)	---	---	-	-	--	-	-

() Extrapolated values.

STATION NO. 5-2C-45

DATE 5 6 1952 LAT. 28° 41' N. LONG. 90° 08' W.
Day Month Year
TIME 0259 DEPTH 27 MAX. SAMPLE DEPTH -- WIRE ANGLE 5 °
GCT Faths. Meters
WATER COLOR - WEATHER 01 SEA 0 SWELL -- ° T. 0 ft.
Code Code Code Direction Hgt.
-- sec. CLOUDS -- -- TEMP. 80.8 °F. 74.4 °F.
Period Type Amount Dry Wet
BAR. 29.94 in. REL. HUM. 72 % WIND -- ° T. 0 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	---	31.46					
10	24.55	35.88					
25	21.59	---					
28	21.34	---					
39	20.33	---					
45	19.78	36.38					

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	(27.60)	31.46	19.89					
10	24.55	35.88	24.16					
20	22.25	36.07	24.99					
30	21.15	36.22	25.40					

() Extrapolated values.

Figure 20.--Locations of stations occupied on Cruise 8-3C.

STATION NO. 8-3C-1

DATE 28 2 1953 (Day Month Year) LAT. 29° 07 .5' N. LONG. 94° 08.5' W.

TIME 0753 (GCT) DEPTH 9 (Faths.) MAX. SAMPLE DEPTH 13 (Meters) WIRE ANGLE 0 °

WATER COLOR - (code) WEATHER 44 (Ci) SEA 1 (Code) SWELL 100 °T. (Direction) 1 ft. (Hgt.)

4 sec. (Period) CLOUDS As (Type) 3 (Amount) TEMP. 59.3 °F. (Dry) 59.2 °F. (Wet)

BAR. 30.02 in. REL. HUM. 100 % WIND 210 °T. (Direction) 1 (Force) VIS. 0 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	14.71	36.18	0.3	0.8	1	0.0	3.8
2	14.73	36.09	0.7	0.4	0	0.0	0.4
13	14.38	36.09	0.4	0.4	1	0.0	0.3

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	14.71	36.18	26.96	0.3	0.8	1	0.0	3.8
10	14.50	36.09	26.94	0.5	0.4	1	0.0	0.3

STATION NO. 8-3C-2

DATE 13 (Day) 2 (Month) 1953 (Year) LAT. 29° 06 .0' N. LONG. 93° 01 .0' W.

TIME 0340 (GCT) DEPTH 9 (Faths.) MAX. SAMPLE DEPTH 10 (Meters) WIRE ANGLE 0 °

WATER COLOR 40 (code) WEATHER 00 (Code) SEA 2 (Code) SWELL - (Direction) °T. - (Hgt.) ft.

- (Period) sec. CLOUDS - (Type) 0 (Amount) TEMP. 58.0 (Dry) °F. 49.0 (Wet) °F.

BAR. 31.35 in. REL. HUM. 51 % WIND - (Direction) °T. - (Force) VIS. 9 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	16.68	---	0.4	0.3	1	-	1.2
2	16.74	---	3.2	0.2	1	1.8[a]	0.1
10	16.73	---	0.6	1.4	1	-	0.4

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	16.68	---		0.4	0.3	1	-	1.2
10	16.73	---		0.6	1.4	1	-	0.4

(a) Green carbohydrates.

STATION NO. 8-3C-3

DATE 13 (Day) 2 (Month) 1953 (Year) LAT. 29° 00 .0' N. LONG. 92° 03 .0' W.

TIME 1102 (GCT) DEPTH 10 (Faths.) MAX. SAMPLE DEPTH 15 (Meters) WIRE ANGLE 7 °

WATER COLOR - (Code) WEATHER 00 (Code) SEA 2 (Code) SWELL 040 (Direction) °T. - (Hgt.) ft.

- (Period) sec. Clouds 0 (Type) - (Amount) TEMP. 53.1 (Dry) °F. 47.0 (Wet) °F.

BAR. 31.45 in. REL. HUM. 63 % WIND 020 (Direction) °T. 4 (Force) VIS. 9 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	16.18	---	1.4	0.4	1	-	0.6
2	16.24	---	0.6	0.6	1	1.7	0.5
8	16.25	---	3.0	0.6	1	0.6	0.7
15	16.74	---	1.0	0.4	1	0.5	0.5

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	16.18	---	---	1.4	0.4	1	-	0.6
10	16.25	---	---	2.4	0.5	1	0.6	0.6

STATION NO. 8-3C-4

DATE 13 (Day) 2 (Month) 1953 (Year) LAT. 28° 29 . 2' N. LONG. 91° 07 .0' W.

TIME 1918 (GCT) DEPTH 9 (Faths.) MAX. SAMPLE DEPTH 13 (Meters) WIRE ANGLE 19 °

WATER COLOR 40 (Code) WEATHER 03 (Code) SEA 2 (Code) SWELL - (Direction) °T. - (Hgt.) ft.

- (Period) sec. CLOUDS Ci (Type) 1 (Amount) TEMP. 53.6 (Dry) °F. 48.5 (Wet) °F.

BAR. 30.13in. REL. HUM. 64 % WIND 020 (Direction) °T. 3 (Force) VIS. 7 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	16.82	--		1.4	3	-	0.0
2	*16.09	--	0.4	0.2	1	-	0.3
7	16.84	--	0.5	0.2	2	1.1	0.9
13	16.94	--	0.5	0.4	1	0.2	-

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot Mg/l
0	16.82	---	---	-	1.4	3	-	0.0
10	16.85	---	---	0.5	0.3	2	0.7	-

*Values not used to draw smooth curves.

STATION NO. 8-3C-5

TE 14 2 1953 LAT. 28° 57.0' N. LONG. 90° 11.5' W.
Day Month Year

ME 0321 DEPTH 10 MAX. SAMPLE DEPTH 15 WIRE ANGLE 15 °
GCT Faths. Meters

TER COLOR 40 WEATHER 02 SEA 0 SWELL - °T. - ft.
Code Code Code Direction Hgt.

- sec. CLOUDS - - TEMP. 54.9 °F. 49.6 °F.
eriod Type Amount Dry Wet

R. 30.9 in. REL. HUM. 70 % WIND - °T. 0 VIS. 7
Direction Force Code

OBSERVED VALUES

pth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	16.40	35.70	0.6	-	4	1.8	0.7
2	---	---	0.8	0.2	3	1.0[a]	0.0
8	17.36	---	0.6	0.2	3	0.1	0.5
15	16.62	---	0.9	1.2	3	1.6	0.5

VALUES AT STANDARD DEPTHS

epth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	16.40	35.70	26.21	0.6	-	4	1.8	0.7
10	17.35	---	---	0.7	0.5	3	0.5	0.5

(a) Green carbohydrates.

STATION NO. 8-3C-6

DATE 14 (Day) 2 (Month) 1953 (Year) LAT. 28° 58 . 0' N. LONG. 89° 16 .0' W.

TIME 1252 (GCT) DEPTH 12 (Faths.) MAX. SAMPLE DEPTH 17 (Meters) WIRE ANGLE 0 °

WATER COLOR 40 (Code) WEATHER 03 (Code) SEA 1 (Code) SWELL - (Direction) °T. - (Hgt.) ft.

- (Period) sec. CLOUDS As (Type) 7 (Amount) TEMP. 55.2 (Dry) °F. 52.5 (Wet) °F.

BAR. 29.97 in. REL. HUM. 82 % WIND - (Direction) °T. - (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	15.28	---	1.1	0.4	12	0.6	0.8
2	*14.58	---	1.0	0.5	5	0.6	0.7
9	16.75	---	-	-	4	1.0	0.8
17	17.78	---	0.8	0.6	2	1.0	1.2

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	15.28	-	---	1.1	0.4	12	0.6	0.8
10	16.85	-	---	0.9	0.6	4	1.0	0.9

STATION NO. 8-3C-8

ATE 17 2 1953 LAT. 30° 03.0' N. LONG. 87° 46.5' W.
Day Month Year

IME 0500 DEPTH 9 MAX. SAMPLE DEPTH 10 WIRE ANGLE 0 °
GCT Faths. Meters

ATER COLOR 40 WEATHER 02 SEA 2 SWELL - °T. - ft.
Code Code Code Direction Hgt.

- sec. CLOUDS - - TEMP. 62.2 °F. 57.8 °F.
eriod Type Amount Dry Wet

AR. 31.05 in. REL. HUM. 79 % WIND - °T. - VIS. -
Direction Force Code

OBSERVED VALUES

epth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	15.25	31.27	0.5	1.6	1	0.4	1.3
2	15.31	31.27	0.7	0.3	1	0.1	0.5
10	16.03	33.82	0.6	0.2	1	0.2	-

VALUES AT STANDARD DEPTHS

epth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	15.25	31.27	---	0.5	1.6	1	0.4	1.3
10	16.03	33.82	24.85	0.6	0.2	1	0.2	-

STATION NO. 8-3C-9

DATE 17 (Day) 2 (Month) 1953 (Year) LAT. 30° 18 .0' N. LONG. 86° 38 . 0' W.

TIME 1238 (GCT) DEPTH 12 (Faths.) MAX. SAMPLE DEPTH 20 (Meters) WIRE ANGLE 0 °

WATER COLOR 40 (Code) WEATHER 03 (Code) SEA 2 (Code) SWELL - (Direction) °T. - (Hgt.) ft.

- (Period) sec. CLOUDS Sc (Type) 8 (Amount) TEMP. 56.2 (Dry) °F. 54.0 (Wet) °F

BAR. 30.18 in. REL. HUM. 88 % WIND 340 (Direction) °T. 4 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	15.54	35.13		0.2	1	0.0	0.4
2	15.58	35.16	0.3	1.1	0	0.0	0.3
10	15.61	35.12	0.6	0.0	1	0.8	0.3
20	16.17	35.71	3.0	0.1	1	0.1	0.7

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot Mg/l
0	15.54	35.13	25.97	-	0.2	1	0.0	0.4
10	15.61	35.12	25.94	0.6	0.0	1	0.8	0.3
20	16.17	35.71	26.27	3.0	0.1	1	0.1	0.7

STATION NO. 8-3C-10

ATE 17 2 1953 LAT. 30° 00.0' N. LONG. 85° 40.0' W.
Day Month Year

IME 1920 DEPTH 12 MAX. SAMPLE DEPTH 19 WIRE ANGLE 16 °
GCT Faths. Meters

ATER COLOR 30 WEATHER 01 SEA 2 SWELL 310 ° T. 4 ft.
Code Sc Code Code Direction Hgt.

5 sec. CLOUDS Ci 7 TEMP. 61.4 °F. 50.5 °F.
eriod Type Amount Dry Wet

AR. 30.24in. REL. HUM. 44 % WIND 320 ° T. 4 VIS. 8
Direction Force Code

OBSERVED VALUES

epth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	16.13	34.63	1.9	0.3	1	-	0.7
2	---	35.00	0.4	0.5	1	0.6	0.6
10	16.18	35.03	0.5	0.2	1	0.4	0.1
19	16.80	35.85	0.4	0.4	2	0.0	0.9

VALUES AT STANDARD DEPTHS

epth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	16.13	34.63	25.45	1.9	0.3	1	-	0.7
10	16.18	35.03	25.74	0.5	0.2	1	0.4	0.1
20				0.4				

STATION NO. 8-3C-11

DATE 18 (Day) 2 (Month) 1953 (Year) LAT. 29° 25. 0' N. LONG. 85°00. 0' W.

TIME 2333 (GCT) DEPTH 8 (Faths.) MAX. SAMPLE DEPTH 10 (Meters) WIRE ANGLE 28 °

WATER COLOR 30 (Code) WEATHER 01 (Code) SEA 3 (Code) SWELL 050 (Direction) °T. 3 (Hgt.) ft.

7 (Period) sec. CLOUDS Ac (Type) 4 (Amount) TEMP. 56.2 (Dry) °F. 47.0 (Wet) °F.

BAR. 30.36in. REL. HUM. 50 % WIND 050 (Direction) ° T. 5 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	14.55	34.15	0.4	1.1	0	0.2	1.4
10	15.60	34.54	0.6	0.7	1	1.6	0.5

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	14.55	34.15	25.43	0.4	1.1	0	0.2	1.4
10	15.60	34.54	24.45	0.6	0.7	1	1.6	0.5

STATION NO. 8-3C-13

DATE 19 (Day) 2 (Month) 1953 (Year) LAT. 28° 32. 0' N. LONG. 83° 26 . 0' W.

TIME 1719 (GCT) DEPTH 12 (Faths.) MAX. SAMPLE DEPTH 16 (Meters) WIRE ANGLE 4 °

WATER COLOR 10 (Code) WEATHER 05 (Code) SEA 2 (Code) SWELL 050 (Direction) ° T. 3 (Hgt.) ft.

4 (Period) sec. CLOUDS Ac (Type) 1 (Amount) TEMP. 62.5 (Dry) °F. 60.3 (Wet) °F.

BAR. 30.29 in. REL. HUM. 89 % WIND 070 (Direction) ° T. 4 (Force) VIS. 7 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	15.90	35.59	0.7	0.2	0	0.5	1.0
2	---	35.60	0.8	0.0	1	0.4	1.4
10	15.78	35.62	0.6	1.5	1	0.0	-
16	15.76	35.66	0.4	0.2	1	0.7	-

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	15.90	35.59	26.24	0.7	0.2	0	0.5	1.0
10	15.78	35.62	26.29	0.6	1.5	1	0.0	-

STATION NO. 8-3C-14

DATE 20 2 1953 LAT. 27° 36.0' N. LONG. 83° 08.0' W.
Day Month Year

TIME 0231 DEPTH 12 MAX. SAMPLE DEPTH 18 WIRE ANGLE 0 °
GCT Faths. Meters

WATER COLOR 30 WEATHER 01 SEA 1 SWELL 100 ° T. 1 ft.
Code Code Code Direction Hgt.

7 sec. CLOUDS Sc 6 TEMP. 66.7 °F. 63.6 °F.
Period Type Amount Dry Wet

BAR. 30.20 in. REL. HUM. 85 % WIND 100 ° T. 3 VIS. 7
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	17.24	35.62	0.7	0.2	1	0.0[a]	0.0
2	17.30	35.60	0.4	0.4	0	0.4	1.9
10	16.88	35.63	0.4	-	1	-	2.0
18	16.80	35.63	0.8	0.6	1	0.0	1.2

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	17.24	35.62	25.95	0.7	0.2	1	0.0	0.0
10	16.88	35.63	26.05	0.4	0.5	1	0.2	2.0

(a) Green carbohydrates.

STATION NO. 8-3C-15

DATE 20 (Day) 2 (Month) 1953 (Year) LAT. 26° 44.0' N. LONG. 82° 53.5' W.

TIME 1016 (GCT) DEPTH 13 (Faths.) MAX. SAMPLE DEPTH 20 (Meters) WIRE ANGLE 0 °

WATER COLOR 20 (Code) WEATHER 03 (Code) SEA 2 (Code) SWELL 90 (Direction) ° T. 2 (Hgt.) ft.

5 (Period) sec. CLOUDS - (Type) - (Amount) TEMP. 65.9 (Dry) °F. 50.6 (Wet) °F.

BAR. 30.21 in. REL. HUM. 32 % WIND 90 (Direction) ° T. 4 (Force) VIS. - (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	18.66	36.16	0.6	0.5	1	0.0	1.8
2	18.74	36.18	0.4	2.0	1	-	1.8
10	18.66	36.18	0.3	1.0	1	0.5	0.0
20	18.46	36.15	0.9	0.0	1	0.0	0.0

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	18.66	36.16	26.02	0.6	0.5	1	0.0	1.8
10	18.66	36.18	26.03	0.3	1.0	1	0.5	0.0
20	18.46	36.15	26.06	0.9	0.0	1	0.0	0.0

STATION NO. 8-3C-16

DATE 20 (Day) 2 (Month) 1953 (Year) LAT. 25° 51.5' N. LONG. 82° 07.0' W.

TIME 1854 (GCT) DEPTH 9 (Faths.) MAX. SAMPLE DEPTH 12 (Meters) WIRE ANGLE 13 °

WATER COLOR 20 (Code) WEATHER 05 (Code) SEA 2 (Code) SWELL 140 (Direction) ° T. 3 (Hgt.) ft.

5 (Period) sec. CLOUDS Cu (Type) 1 (Amount) TEMP. 71.1 (Dry) °F. 68.4 (Wet) °F.

BAR. 30.13 in. REL. HUM. 86 % WIND 140 (Direction) ° T. 3 (Force) VIS. 7 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	19.49	35.25	0.5	0.3	1	0.3	1.2
2	19.56	35.84	0.4	0.4	1	0.0	0.6
12	19.25	35.25	0.8	0.2	1	1.6	-

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	19.49	35.25	25.10	0.5	0.3	1	0.3	1.2
10	19.30	35.30	25.19	0.7	0.2	1	1.3	-

STATION NO. 8-3C-17

.TE 21 2 1953 LAT. 25° 00.0' N. LONG. 81° 58.0' W.
Day Month Year

:ME 0242 DEPTH 10 MAX. SAMPLE DEPTH 15 WIRE ANGLE 10 °
GCT Faths. Meters

.TER COLOR 20 WEATHER 00 SEA 2 SWELL 110 ° T. 2 ft.
Code Code Code Direction Hgt.

6 sec. CLOUDS -- 0 TEMP. 72.3 °F. 70.0 °F.
riod Type Amount Dry Wet

.R. 30.14 in. REL. HUM. 91 % WIND 110 ° T. 3 VIS. 7
Direction Force Code.

OBSERVED VALUES

pth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	20.96	35.50	2.6	0.1	0	0.0	1.0
2	21.00	---	2.7	0.6	0	0.7	1.8
8	20.94	35.39	0.5	0.4	1	0.4	0.0
15	20.73	35.35	0.8	0.4	4	3.6	-

VALUES AT STANDARD DEPTHS

pth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot Mg/l
0	20.96	35.50	24.91	2.6	0.1	0	0.0	1.0
10	20.90	35.38	24.83	0.6	0.4	2	1.3	-

STATION NO. 8-3C-18

DATE 23 (Day) 2 (Month) 1953 (Year) LAT. 24° 53.0 ' N. LONG. 83° 03.0 ' W.

TIME 0055 (GCT) DEPTH 28 (Faths.) MAX. SAMPLE DEPTH 50 (Meters) WIRE ANGLE 5 °

WATER COLOR 10 (Code) WEATHER 00 (Code) SEA 1 (Code) SWELL 180 (Direction) ° T. 1 (Hgt.) ft.

7 (Period) sec. CLOUDS -- (Type) 0 (Amount) TEMP. 74.8 (Dry) °F. 73.0 (Wet) °F.

BAR. 30.26 in. REL. HUM. 91 % WIND 340 (Direction) ° T. 2 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	23.20	36.33	0.5	0.0	1	-	0.9
2	23.25	36.35	0.7	0.0	1	0.0	1.4
10	22.19	36.36	0.4	0.3	1	1.4	0.8
20	21.65	36.35	1.2	0.6	1	0.0	-
30	21.40	36.35	0.6	1.1	1	1.1	0.5
50	--	36.35	0.6	0.2	1	0.0	0.9

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	23.20	36.33	24.91	0.5	0.0	1	-	0.9
10	22.19	36.36	25.22	0.4	0.3	1	1.4	0.8
20	21.65	36.35	25.36	1.2	0.6	1	0.0	0.6
30	21.40	36.35	25.44	0.6	1.1	1	1.1	0.5
50	---	36.35	---	0.6	0.2	1	0.0	0.9

STATION NO. 8-3C-19

TE 23 2 1953 LAT. 25° 36.0' N. LONG. 83° 03.0' W.
Day Month Year

ME 0701 DEPTH 27 MAX. SAMPLE DEPTH 50 WIRE ANGLE 0 °
GCT Faths. Meters

TER COLOR 20 WEATHER 01 SEA 1 SWELL 310 ° T. 4 ft.
Code Code Code Direction Hgt.

10 sec. CLOUDS Sc 3 TEMP. 72.8 °F. 70.9 °F.
riod Type Amount Dry Wet

R. 30.29 in. REL. HUM. 91 % WIND 070 ° T. 1 VIS. 7
Direction Force Code

OBSERVED VALUES

pth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	21.55	36.33	0.7	0.4	0	-	0.8
2	21.43	36.31	0.6	0.2	0	0.1	1.4
10	21.31	36.33	0.4	0.3	1	0.3[a]	0.4
20	20.78	36.31	1.0	0.2	1	0.4	1.2
30	20.72	36.35	0.6	0.8	2	-	-
50	*22.62	36.33	0.4	0.1	0	0.0	0.1

VALUES AT STANDARD DEPTHS

pth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	21.55	36.33	25.38	0.7	0.4	0	-	0.8
10	21.31	36.33	25.44	0.4	0.3	1	0.3	0.4
20	20.78	36.31	25.57	1.0	0.2	1	0.4	1.2
30	20.72	36.35	25.62	0.6	0.8	2	0.3	0.8
50	*22.62	36.33	25.08	0.4	0.1	0	0.0	0.1

*Values not used to draw smooth curves.
(a) Green carbohydrates.

STATION NO. 8-3C-20

DATE 23 (Day) 2 (Month) 1953 (Year) LAT. 25° 36.0' N. LONG. 84° 00.0' W.

TIME 1401 (GCT) DEPTH 76 (Faths.) MAX. SAMPLE DEPTH 138 (Meters) WIRE ANGLE 7 °

WATER COLOR 10 (Code) WEATHER 01 (Code) SEA 2 (Code) SWELL 080 (Direction) ° T. 3 (Hgt.) ft.

6 (Period) sec. CLOUDS Sc (Type) 2 (Amount) TEMP. 74.7 (Dry) °F. 71.0 (Wet) °F.

BAR. 30.30 in. REL. HUM. 82 % WIND 080 (Direction) ° T. 3 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	23.91	36.18	0.5	1.0	1	-	0.3
2	23.95	36.24	0.4	0.1	0	0.0[a]	0.6
10	23.93	36.20	0.4	0.2	1	0.0	0.8
20	23.93	36.22	1.0	0.2	1	1.2	0.1
30	23.80	36.27	0.4	0.2	1	0.0	0.7
50	22.56	36.29	0.6	0.2	1	0.8	1.8
74	21.90	36.58	0.5	0.2	6	0.2	0.9
99	21.32	36.67	0.7	0.6	3	0.0[a]	1.1
138	17.39	36.35	1.0	1.0	9	0.7	0.5

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	23.91	36.18	24.58	0.5	1.0	1	-	0.3
10	23.93	36.20	24.59	0.4	0.2	1	0.0	0.8
20	23.93	36.22	24.61	1.0	0.2	1	1.2	0.1
30	23.80	36.27	24.69	0.4	0.2	1	0.0	0.7
50	22.56	36.29	25.06	0.6	0.2	1	0.8	1.8
75	21.90	36.58	25.47	0.5	0.2	6	0.2	0.9
100	21.32	36.67	25.70	0.7	0.6	3	0.0	1.1

(a) Green carbohydrates.

STATION NO. 8-3C-21

ATE 23 (Day) 2 (Month) 1953 (Year) LAT. 25° 02.0' N. LONG. 84° 04.0' W.

IME 1832 (GCT) DEPTH 75 (Faths.) MAX. SAMPLE DEPTH 131 (Meters) WIRE ANGLE 6 °

ATER COLOR 00 (Code) WEATHER 01 (Code) SEA 2 (Code) SWELL 70 (Direction) ° T. 3 (Hgt.) ft.

4 (Period) sec. CLOUDS Cu (Type) 2 (Amount) TEMP. -- (Dry) °F. -- (Wet) °F.

AR. 30.27 in. REL. HUM. - % WIND 060 (Direction) ° T. 3 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.65	36.20	0.1	0.1	0	0.2	-
2	24.68	36.17	0.4	0.2	2	0.0	0.4
10	24.62	36.18	0.5	0.0	1	0.0	0.8
19	24.59	36.35	1.5	0.8	1	0.0	0.4
29	24.00	36.27	0.5	1.0	0	0.3	0.5
48	22.33	36.36	0.2	1.0	2	0.0	0.4
73	21.32	36.40	1.9	0.1	1	0.4	0.0
97	20.62	36.47	-	0.2	2	3.8	0.8
131	19.89	36.58	2.0	-	5	0.1	0.5

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot Mg/l
0	24.65	36.20	24.38	0.1	0.1	0	0.2	-
10	24.62	36.18	24.37	0.5	0.0	1	0.0	0.8
20	24.59	36.35	24.51	1.4	0.8	1	0.0	0.4
30	24.00	36.27	24.63	0.5	1.0	0	0.3	0.5
50	22.21	36.37	25.22	0.3	.9	2	0.0	0.4
75	21.20	36.41	25.54	1.9	0.1	1	0.7	0.1
100	20.60	36.48	25.75	1.9	-	2	3.5	0.8

STATION NO. 8-3C-22

DATE 24 (Day) 2 (Month) 1953 (Year) LAT. 24° 37.0' N. LONG. 84° 32.0' W.

TIME 0302 (GCT) DEPTH 1800 (Faths.) MAX. SAMPLE DEPTH 237 (Meters) WIRE ANGLE 5 °

WATER COLOR 00 (Code) WEATHER 01 (Code) SEA 2 (Code) SWELL 070 (Direction) ° T. 3 (Hgt.) ft.

4 (Period) sec. CLOUDS Cu (Type) 1 (Amount) TEMP. 74.9 (Dry) °F. 72.2 (Wet) °F.

BAR. 30.21 in. REL. HUM. 86 % WIND 110 (Direction) °T. 3 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.56	36.22		0.0	0	0.2	0.6
2	*23.47	36.15	0.4	0.8	0	0.2	0.5
10	24.55	36.24	0.7	1.0	1	0.0	0.9
24	24.53	36.27	0.3	0.2	1	0.4	0.7
48	24.44	36.27	0.4	0.0	2	0.4	0.3
71	--	36.40	0.3	0.4	0	0.8	0.4
95	23.84	36.58	0.4	0.2	2	1.1	0.2
142	21.21	36.62	0.5	0.4	2	-	0.9
189	19.32	36.69	0.8	0.6	7	0.1	1.1
237	18.41	36.47	1.0	0.4	9	0.8	0.1

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	O_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot Mg/l
0	24.56	36.22	24.42	-	0.0	0	0.2	0.6
10	24.55	36.24	24.44	0.7	1.0	1	0.0	0.9
20	24.55	36.26	24.45	0.4	0.4	1	0.3	0.8
30	24.53	36.27	24.47	0.3	0.1	1	0.4	0.6
50	24.44	36.27	24.50	0.4	0.0	2	0.4	0.3
75	24.15	36.45	24.72	0.3	0.4	0	0.9	0.4
100	23.65	36.59	24.97	0.4	0.2	2	1.0	0.3
150	20.65	36.63	25.85	0.6	0.4	3	0.5	0.9
200	19.13	36.69	26.30	0.8	0.6	7	0.3	0.9

*Values not used to draw smooth curves.

STATION NO. 8-3C-23

DATE 24 (Day) 2 (Month) 1953 (Year) LAT. 24° 11.0' N. LONG. 85° 07.0' W.

TIME 1140 (GCT) DEPTH 1800 (Faths.) MAX. SAMPLE DEPTH 997 (Meters) WIRE ANGLE 16 °

WATER COLOR 10 (Code) WEATHER 02 (Code) SEA 2 (Code) SWELL 90 (Direction) ° T. 4 (Hgt.) ft.

6 (Period) sec. CLOUDS Cu (Type) 3 (Amount) TEMP. 75.6 (Dry) °F. 72.3 (Wet) °F.

BAR. 30.16 in. REL. HUM. 82 % WIND 70 (Direction) ° T. 3 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.33	36.27	-	0.1	1	1.6	
10	24.37	36.27	0.0	0.4	1	0.4	0.1
24	24.34	36.31	0.4	-	2	0.0	0.3
48	24.05	36.33	0.5	0.0	28	0.0	0.6
72	--	36.33	0.4	0.1	0	0.2	1.1
96	23.98	36.31	0.6	0.2	1	0.4	0.5
143	23.94	36.85	0.1	0.1	1	-	0.6
191	22.44	36.76	3.0	0.3	3	0.2	0.2
238	19.94	36.65	1.3	0.4	4	0.6	0.4
286	--	36.55	1.0	0.5	8	-	0.2
381	16.47	36.26	1.0	1.0	11	1.0	0.2
473	13.59	35.77	1.8	-	18	0.2	1.1
557	10.70	*35.84	2.0	1.6	4	0.6	1.2
700	6.94	34.92	2.7	2.6	31	0.4[a]	0.4
839	6.62	35.03	1.8	2.0	26	0.2	-
997	5.95	34.97	1.6	1.5	18	0.4	0.5

*Values not used to draw smooth curves.
(a) Green carbohydrates.

STATION NO. 8-3C-23

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.33	36.27	24.53		0.1	1	1.6	-
10	24.37	36.27	24.52	0.0	0.4	1	0.4	0.1
20	24.37	36.30	24.54	0.3	0.3	2	0.1	0.2
30	24.31	36.32	24.57	0.4	0.2	9	0.0	0.4
50	24.04	36.33	24.66	0.5	0.0	26	0.0	0.6
75	24.00	36.33	24.67	0.4	0.1	0	0.2	1.0
100	23.98	36.31	24.66	0.6	0.2	1	0.4	0.5
150	23.94	36.84	25.07	0.6	0.1	1	0.3	0.5
200	21.80	36.74	25.62	2.7	0.3	3	0.3	0.2
250	19.60	36.62	26.12	1.2	0.4	5	0.6	0.3
300	18.50	36.52	26.33	1.0	0.6	8	0.8	0.2
400	16.00	36.19	26.68	1.2	1.1	12	0.8	0.4
500	12.90	35.61	26.90	1.9	1.4	14	0.3	1.1
600	9.10	35.15	27.24	2.2	1.9	12	0.5	1.0
700	6.94	34.92	27.38	2.7	2.6	31	0.4	0.4
800	6.71	34.99	27.44	2.0	2.2	27	0.3	0.4

STATION NO. 8-3C-24

TE 24 2 1953 LAT. 23° 40.0' N. LONG. 85° 45.0' W.
Day Month Year

ME 1852 DEPTH 1860 MAX. SAMPLE DEPTH 1176 WIRE ANGLE 15°
GCT Faths. Meters

TER COLOR 00 WEATHER 05 SEA 2 SWELL 100 ° T. 5 ft.
Code Code Code Direction Hgt.

6 sec. CLOUDS - 0 TEMP. 78.5 °F. 74.2 °F.
riod Type Amount Dry Wet

R. 30.13 in. REL. HUM. 83 % WIND 130 ° T. 3 VIS. 8
Direction Force Code

OBSERVED VALUES

pth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.88	36.00	0.8	0.3	1	0.6	0.7
10	25.84	36.00	0.9	0.4	0	0.4	0.4
24	25.83	*36.94	0.6	0.0	1	0.4	0.5
47	25.80	35.99	2.0	0.2	1	0.8	1.3
71	---	36.04	0.0	0.0	1	-	1.1
94	25.63	36.13	1.8	-	1	5.8	1.7
42	24.23	36.60	0.9	0.0	3	0.9[a]	0.5
89	21.37	*37.14	1.4	0.4	6	0.4[a]	0.3
37	19.62	36.71	2.8	1.4	7	1.2	0.1
85	---	36.55	0.8	0.5	5	-	1.4
382	16.52	36.35	2.4	1.2	10	0.0	0.8
480	13.62	35.82	1.4	1.4	5	1.5	1.0
578	10.99	35.44	1.4	2.1	24	-	0.2
776	---	---	-	-	-	-	-
976	6.40	34.97	2.8	2.1	29	0.4	1.3
176	4.80	35.07	1.7	2.7	27	1.0[a]	1.6

*Values not used to draw smooth curves.

a) Green carbohydrates.

STATION NO. 8-3C-24

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.88	36.00	23.85	0.8	0.3	1	0.6	0.7
10	25.84	36.00	23.86	0.9	0.4	0	0.4	0.4
20	25.83	36.00	23.86	0.7	0.1	1	0.4	0.5
30	25.83	35.99	23.85	1.0	0.1	1	0.5	0.7
50	25.80	35.99	23.86	1.7	0.2	1	1.1	1.3
75	25.72	36.05	23.94	0.3	0.0	1	3.8	1.2
100	25.61	36.16	24.05	1.7	0.0	1	5.2	1.5
150	23.95	36.62	24.91	1.0	0.1	4	0.8	0.5
200	21.02	36.69	25.80	1.7	0.6	6	0.6	0.3
250	19.34	36.71	26.26	2.3	1.2	6	1.1	0.5
300	18.30	36.52	26.38	1.0	0.6	6	0.7	1.3
400	16.25	36.32	26.72	2.2	1.2	9	0.3	0.8
500	12.67	35.72	27.04	1.4	1.5	9	1.5	0.8
600	10.64	35.39	27.17	1.5	2.1	24	1.2	0.3
700	9.40	35.24	27.26	1.8	2.1	26	1.0	0.5
800	---	---	---	2.2	2.1	27	0.9	0.8
1000	6.21	34.97	27.52	2.7	2.2	29	0.5	1.3

STATION NO. 8-3C-25

DATE 25 2 1953 LAT. 24° 14.5' N. LONG. 86° 17.0' W.
Day Month Year

TIME 0122 DEPTH 1000 MAX. SAMPLE DEPTH 1044 WIRE ANGLE 20°
GCT Faths. Meters

WATER COLOR 00 WEATHER 05 SEA 1 SWELL 140 ° T. - ft.
Code Code Code Direction Hgt.

5 sec. CLOUDS Cu 1 TEMP. 76.4 °F. 72.2 °F.
Period Type Amount Dry Wet

BAR. 30.09 in. REL.HUM. 82 % WIND 140 ° T. 2 VIS. 7
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.76	35.99	0.3	0.2	0	-	0.5
2	*25.95	35.91	2.4	0.8	0	0.6	0.1
10	25.81	35.91	0.7	0.2	1	5.2	0.3
24	25.87	35.99	0.3	0.1	3	0.8	0.2
47	25.80	35.95	0.4	0.2	1	0.0	-
70	---	36.00	0.4	0.5	1	0.8	0.5
93	25.75	36.09	0.0	0.2	1	0.8	0.4
140	25.41	36.60	0.4	0.4	3	-	1.3
186	22.47	36.80	0.2	0.2	3	0.2	0.8
232	20.06	36.76	0.6	0.2	24	-	0.2
277	---	36.62	0.3	0.4	7	-	0.9
362	16.66	36.26	2.6	1.9	11	0.0	0.0
446	14.18	35.46	-	-	-	-	-
528	11.80	34.88	1.9	1.6	21	1.4	0.5
688	7.72	34.96	-	-	-	-	-
855	5.85	---	2.4	-	28	0.0[a]	0.4
1044	4.98	---	1.9	1.6	1	-	0.1

*Values not used to draw smooth curves.

(a) Green carbohydrates.

STATION NO. 8-3C-25

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.76	35.99	23.88	0.3	0.2	0	-	0.5
10	25.81	35.91	23.80	0.7	0.2	1	5.2	0.3
20	25.84	35.98	23.85	0.4	0.1	2	2.1	0.2
30	25.86	35.98	23.84	0.3	0.1	2	0.6	0.2
50	25.77	35.95	23.84	0.4	0.2	1	0.1	0.4
75	25.73	36.01	23.90	0.3	0.4	1	0.8	0.5
100	25.72	36.21	24.06	0.1	0.2	1	0.8	0.5
150	25.18	36.66	24.56	0.4	0.4	3	0.4	1.2
200	21.17	36.79	25.83	0.3	0.2	9	0.2	0.6
250	19.69	36.73	26.18	0.4	0.3	17	0.1	0.5
300	18.31	36.54	26.39	0.9	0.8	8	0.1	0.7
400	15.60	35.94	26.58	2.5	1.8	13	0.3	0.1
500	12.59	34.97	26.48	2.0	1.7	19	1.2	0.4
600	9.39	34.88	26.98	2.0	1.6	23	1.1	0.5
700	7.52	(34.97)	27.34	2.2	1.6	25	0.7	0.4
800	6.29	---	---	2.3	1.6	27	0.2	0.4
1000	5.12	---	---	2.0	1.6	7	-	0.2

() Extrapolated values.

STATION NO. 8-3C-26

DATE 25 (Day) 2 (Month) 1953 (Year) LAT. 24° 33.0' N. LONG. 86° 53.0' W.

TIME 0830 (GCT) DEPTH 1000 (Faths.) MAX. SAMPLE DEPTH 1200 (Meters) WIRE ANGLE 0 °

WATER COLOR 00 (Code) WEATHER 05 (Code) SEA 1 (Code) SWELL 170 (Direction) ° T. 2 ft. (Hgt.)

5 (Period) sec. CLOUDS Cu (Type) 2 (Amount) TEMP. 76.3 (Dry) °F. 70.7 (Wet) °F.

BAR. 30.06 in. REL. HUM. 78 % WIND 90 (Direction) ° T. 2 (Force) VIS. 7 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.76	35.93	0.4	0.2	1	0.0	0.9
2	---	35.95	0.6	0.1	0	0.7	0.6
10	25.82	---	0.1	0.0	1	0.2	0.5
25	25.84	35.93	1.8	0.2	1	1.0	0.1
50	24.35	36.22	2.0	0.0	1	0.0	0.1
75	*22.07	36.24	0.4	0.3	1	-	1.1
100	24.10	36.27	0.5	1.4	1	-	0.4
150	22.99	36.65	1.0	0.2	3	-	2.0
200	20.13	36.72	2.5	0.7	6	0.4	0.0
250	18.62	36.56	0.6	0.3	8	0.8	1.4
300	---	36.42	0.8	0.5	9	2.2	-
400	15.44	36.06	1.2	-	12	7.8	1.2
500	12.08	35.49	2.3	1.8	23	0.5	0.4
600	9.52	35.16	2.0	2.0	27	4.2	1.2
800	6.51	34.87	2.7	5.7	28	0.0	0.2
1000	5.26	34.92	3.9	2.6	25	0.6	0.6
1200	--	34.96	1.9	1.5	30	0.2	1.1

*Values not used to draw smooth curves.

STATION NO. 8-3C-26

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.76	35.93	23.83	0.4	0.2	1	0.0	0.9
10	25.82	35.95	23.83	0.1	0.0	1	0.2	0.5
20	25.85	35.94	23.81	1.2	0.1	1	0.7	0.2
30	25.40	35.92	23.93	1.8	0.2	1	0.8	0.1
50	24.35	36.22	24.48	2.0	0.0	1	0.0	0.1
75	24.21	36.24	24.54	0.4	0.3	1	0.1	1.1
100	24.10	36.27	24.60	0.5	1.4	1	0.1	0.4
150	22.99	36.65	25.21	1.0	0.2	3	0.3	2.0
200	20.13	36.72	26.06	2.5	0.7	6	0.4	0.0
250	18.62	36.56	26.33	0.6	0.3	8	0.8	1.4
300	17.79	36.42	26.43	0.8	0.5	9	2.2	1.3
400	15.44	36.06	26.71	1.2	1.2	12	7.8	1.2
500	12.08	35.49	26.98	2.3	1.8	23	0.5	0.4
600	9.52	35.16	27.18	2.0	2.0	27	4.2	1.2
700	7.79	34.96	27.30	2.3	3.9	27	2.1	0.7
800	6.51	34.87	27.40	2.7	5.7	28	0.0	0.2
1000	5.26	34.92	27.60	3.9	2.6	25	0.6	0.6
1200	--	34.96	---	1.9	1.5	30	0.2	1.1

STATION NO. 8-3C-27

DATE 25 (Day) 2 (Month) 1953 (Year) LAT. 24° 58.0' N. LONG. 87° 32.0' W.

TIME 1515 (GCT) DEPTH 1840 (Faths.) MAX. SAMPLE DEPTH 856 (Meters) WIRE ANGLE 22°

WATER COLOR 00 (Code) WEATHER 05 (Code) SEA 2 (Code) SWELL 130 (Direction) ° T. 2 (Hgt.) ft.

4 (Period) sec. CLOUDS Cu (Type) 1 (Amount) TEMP. 78.2 (Dry) °F. 73.7 (Wet) °F.

BAR. 30.11 in. REL. HUM. 83 % WIND 110 (Direction) ° T. 3 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C.	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.72	36.08	0.3	0.4	0	2.1	1.4
9	25.76	36.00	0.7	1.3	1	0.3	0.0
22	25.74	36.02	0.0	1.1	1	0.1	0.4
46	25.74	36.04	0.8	0.1	1	0.5	1.0
68	*20.47	36.29	0.3	0.2	1	0.0	0.3
92	24.05	36.35	0.2	0.3	1	1.6	0.5
137	22.59	36.91	0.6	0.6	4	0.6	0.5
182	20.35	36.72	0.2	0.6	4	0.0	0.9
227	19.41	36.64	0.7	0.6	6	1.2[a]	0.6
271	---	36.56	0.6	0.8	6	0.8	0.8
358	16.57	36.24	0.8	0.7	10	0.0	0.5
442	14.34	35.88	1.9	1.7	16	0.0	-
525	11.84	35.46	2.0	1.8	10	0.0	2.1
682	8.68	35.05	1.9	2.1	30	-	0.1
856	6.26	34.87	2.6	2.2	23	0.4	0.1

*Values not used to draw smooth curves.
(a) Green carbohydrates.

STATION NO. 8-3C-27

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.72	36.08	23.96	0.3	0.4	0	2.1	1.4
10	25.75	36.00	23.89	0.6	1.3	1	0.3	0.0
20	25.75	36.02	23.90	0.2	1.1	1	0.1	0.3
30	25.74	36.03	23.91	0.3	0.8	1	0.2	0.6
50	25.74	36.05	23.93	0.7	0.1	1	0.4	0.9
75	24.65	36.32	24.47	0.3	0.2	1	0.5	0.4
100	23.79	36.38	24.78	0.3	0.4	2	1.4	0.5
150	21.60	36.90	25.79	0.5	0.6	4	0.4	0.6
200	19.95	36.69	26.09	0.4	0.6	5	0.5	0.8
250	19.04	36.60	26.26	0.6	0.7	6	1.0	0.7
300	17.85	36.48	26.46	0.7	0.8	7	0.5	0.7
400	15.46	36.05	26.70	1.4	1.2	13	0.0	0.9
500	12.44	35.58	26.98	2.0	1.8	12	0.0	1.9
600	10.12	35.23	27.13	1.9	1.9	20	0.1	1.1
700	8.40	35.03	27.25	2.0	2.1	29	0.2	0.1
800	6.95	34.91	27.37	2.4	2.2	25	0.3	0.1

STATION NO. 8-3C-28

DATE 25 (Day) 2 (Month) 1953 (Year) LAT. 25° 14.0' N. LONG. 88° 04.0' W.

TIME 2054 (GCT) DEPTH 1925 (Faths.) MAX. SAMPLE DEPTH 559 (Meters) WIRE ANGLE 42°

WATER COLOR 00 (Code) WEATHER 05 (Code) SEA 1 (Code) SWELL 140 (Direction) ° T. 2 (Hgt.) ft.

5 (Period) sec. CLOUDS Cu (Type) 3 (Amount) TEMP. 79.3 (Dry) °F. 72.2 (Wet) °F.

BAR. 30.05 in. REL. HUM. 71 % WIND 210 (Direction) ° T.1 (Force) VIS. 7 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.35	*37.36	0.1	0.3	0	1.0	0.6
2	26.41	36.06	0.4	1.2	3	0.0	0.5
8	25.82	36.04	0.6	0.2	1	0.0	-
18	25.78	36.00	0.6	0.3	0	0.0	0.2
34	25.70	36.00	0.2	0.2	1	0.8[a]	0.3
48	25.51	36.04	0.5	0.0	1	-	1.6
62	24.99	36.24	0.4	0.2	0	0.5	0.9
90	22.13	36.62	2.6	0.2	3	-	1.4
117	20.57	36.65	0.5	1.5	5	0.2	0.3
139	19.38	36.67	0.4	0.4	9	0.7	1.6
165	---	36.58	1.0	1.2	9	1.0	0.3
216	17.54	36.49	0.9	0.6	8	0.0	0.6
264	16.54	36.22	2.0	-	12	0.0	0.5
312	14.72	36.02	2.6	1.3	13	-	0.9
390	12.16	35.53	4.4	2.4	24	0.0	0.8
440	10.34	35.35	4.6	4.2	31	1.0	0.3
559	8.31	35.05	1.9	1.5	26	4.7[a]	0.1

*Values not used to draw smooth curves.

(a) Green carbohydrates.

STATION NO. 8-3C-28

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.35	36.06	23.74	0.1	0.3	0	1.0	0.6
10	25.80	36.03	23.90	0.6	0.2	1	0.0	0.3
20	25.76	35.99	23.88	0.5	0.3	0	0.1	0.2
30	25.72	36.00	23.90	0.3	0.2	1	0.6	0.3
50	25.45	36.10	24.06	0.5	0.0	1	0.6	1.5
75	23.55	36.52	24.95	1.4	0.2	1	0.4	1.1
100	21.52	36.63	25.61	1.8	0.7	4	0.3	1.0
150	18.89	36.67	26.34	0.6	0.7	9	0.8	1.0
200	17.80	36.51	26.50	0.9	0.8	8	0.3	0.5
250	16.90	36.35	26.59	1.7	0.8	11	0.0	0.5
300	15.30	36.07	26.75	2.5	1.2	13	0.0	0.8
400	11.80	35.49	27.03	4.4	2.8	25	0.2	0.7
500	9.23	35.19	27.25	3.2	2.9	29	2.9	0.2

STATION NO. 8-3C-29

DATE 26 (Day) 2 (Month) 1953 (Year) LAT. 25° 45.0' N. LONG. 88° 38.0' W.

TIME 0236 (GCT) DEPTH 1800 (Faths.) MAX. SAMPLE DEPTH 1200 (Meters) WIRE ANGLE 0 °

WATER COLOR 00 (Code) WEATHER 05 (Code) SEA 0 (Code) SWELL 100 (Direction) ° T. 2 ft. (Hgt.)

6 (Period) sec. CLOUDS Cu (Type) 1 (Amount) TEMP. 75.2 °F. (Dry) 71.0 °F. (Wet)

BAR. 30.06 in. REL. HUM. 82 % WIND - (Direction) ° T.0 (Force) VIS.7 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.68	36.24	0.3	0.2	1	0.0	1.2
2	*24.59	36.19	0.8	0.0	-	1.5	1.2
10	24.50	36.22	0.4	1.1	1	0.6	1.7
25	23.16	36.67	0.4	0.4	1	0.2	1.8
50	21.65	36.61	0.3	0.2	3	0.0	1.6
75	19.89	36.64	1.4	1.9	10	0.0	0.8
100	18.51	36.44	2.0	0.9	12	0.8	0.4
150	16.60	36.20	1.8	0.8	12	0.8	0.7
200	14.44	35.95	1.4	1.2	20	1.0	-
250	12.89	35.71	1.3	1.0	20	1.0	0.2
300	11.26	35.40	2.1	1.4	23	0.2	1.2
400	9.68	35.22	4.0	2.4	26	0.9	0.3
500	8.22	35.12	2.5	2.0	29	0.0	0.3
600	6.93	34.94	2.1	2.1	24	0.0	0.0
800	5.44	*36.78	2.2	2.3	27	-	0.2
1000	5.23	*35.25	2.2	2.1	29	2.2	0.7
1200	4.53	34.94	1.6	1.4	17	1.0	0.5

*Values not used to draw smooth curves.

STATION NO. 8-3C-29

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.68	36.24	24.40	0.3	0.2	1	0.0	1.2
10	24.50	36.22	24.44	0.4	1.1	1	0.6	1.7
20	24.02	36.67	24.92	0.4	0.6	1	0.3	1.8
30	22.73	36.67	25.30	0.4	0.4	1	0.2	1.8
50	21.65	36.61	25.56	0.3	0.2	3	0.0	1.6
75	19.89	36.64	26.06	1.4	1.9	10	0.0	0.8
100	18.51	36.44	26.27	2.0	0.9	12	0.8	0.4
150	16.60	36.20	26.55	1.8	0.8	12	0.8	0.7
200	14.44	35.95	26.85	1.4	1.2	20	1.0	0.5
250	12.89	35.71	26.99	1.3	1.0	20	1.0	0.2
300	11.26	35.40	27.06	2.1	1.4	23	0.2	1.2
400	9.68	35.22	27.20	4.0	2.4	26	0.9	0.3
500	8.22	35.12	27.35	2.5	2.0	29	0.0	0.3
600	6.93	34.94	27.40	2.1	2.1	24	0.0	0.0
700	6.02	34.88	27.47	2.2	2.2	26	0.6	0.1
800	5.44	34.86	27.53	2.2	2.3	27	1.1	0.2
1000	5.12	34.87	27.58	2.2	2.1	29	2.2	0.7
1200	4.53	34.94	27.70	1.6	1.4	17	1.0	0.5

STATION NO. 8-3C-30

DATE 26 2 1953 LAT. 25° 56.0' N. LONG. 89° 17.5' W.
Day Month Year

TIME 0825 DEPTH 1800 MAX. SAMPLE DEPTH 1200 WIRE ANGLE 0 °
GCT Paths. Meters

WATER COLOR 00 WEATHER 05 SEA 2 SWELL 160 °T. 2 ft.
Code As Code Code Direction Hgt.

3 sec. CLOUDS Cs 2 TEMP. 74.0 °F. 70.8 °F.
Period Type Amount Dry Wet

BAR. 30.03 in. REL. HUM. 86 % WIND 150 ° T. 3 VIS. 7
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.28	36.19	0.2	-	0	0.6	0.4
2	*24.26	36.18	0.4	0.2	1	1.0	0.7
10	24.31	36.18	0.8	0.3	0	0.8	0.6
25	22.95	36.35	0.0	0.6	2	0.3	0.8
50	22.09	36.41	0.3	0.1	1	-	0.1
75	21.75	36.41	1.2	0.0	0	0.0	0.4
100	20.50	36.44	1.2	0.6	3	0.0	0.3
150	17.32	36.35	0.8	0.8	9	0.0	3.2
200	15.30	36.02	1.1	0.7	14	1.7	1.1
250	13.95	35.81	1.2	1.5	5	0.9	1.3
300	12.71	35.62	1.5	1.8	4	0.8	0.2
400	9.76	35.20	3.2	1.9	20	0.0	0.2
500	7.60	34.96	1.8	1.6	27	0.0	0.2
600	6.53	34.91	1.5	2.5	28	0.0	0.3
800	5.36	34.93		1.8	29	0.8[a]	-
1000	4.73	34.97	2.8	2.6	6	0.2	0.4
1200	4.33	34.98	2.0	1.4	28	2.0[a]	0.6

*Values not used to draw smooth curves.
(a) Green carbohydrates.

STATION NO. 8-3C-30

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.28	36.19	24.28	0.2	-	0	0.6	0.4
10	24.31	36.18	24.47	0.8	0.3	0	0.8	0.6
20	24.00	36.27	24.63	0.3	0.5	1	0.5	0.7
30	22.65	36.37	25.10	0.2	0.5	2	0.3	0.7
50	22.09	36.41	25.29	0.3	0.1	1	0.1	0.1
75	21.75	36.41	25.38	1.2	0.0	0	0.0	0.4
100	20.50	36.44	25.75	1.2	0.6	3	0.0	0.3
150	17.32	36.35	26.49	0.8	0.8	9	0.0	3.2
200	15.30	36.02	26.71	1.1	0.7	14	1.7	1.1
250	13.95	35.81	26.84	1.2	1.5	5	0.9	1.3
300	12.71	35.62	26.95	1.5	1.8	4	0.8	0.2
400	9.76	35.20	27.17	3.2	1.9	20	0.0	0.2
500	7.60	34.96	27.32	1.8	1.6	27	0.0	0.2
600	6.53	34.91	27.43	1.5	2.5	28	0.0	0.3
700	5.81	34.92	27.53	1.8	2.1	29	0.4	0.3
800	5.36	34.93	27.60	2.2	1.8	29	0.8	0.4
1000	4.73	34.97	27.70	2.8	2.6	6	0.2	0.4
1200	4.33	34.98	27.75	2.0	1.4	28	2.0	0.6

STATION NO. 8-3C-31

DATE 26 (Day) 2 (Month) 1953 (Year) LAT. 26° 22.0' N. LONG. 89° 53.0' W.

TIME 1451 (GCT) DEPTH 1560 (Faths.) MAX. SAMPLE DEPTH 1134 (Meters) WIRE ANGLE 20°

WATER COLOR 00 (Code) WEATHER 03 (Code) SEA 3 (Code) SWELL 180 (Direction) ° T. 2 (Hgt.) ft.

5 (Period) sec. CLOUDS Ci As (Type) 3 (Amount) TEMP. 75.3 (Dry) °F. 71.2 (Wet) °F.

BAR. 30.09 in. REL. HUM. 82 % WIND 220 (Direction) ° T. 4 (Force) VIS 7 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.23	36.15	0.5	0.0	2	0.4	0.1
2	*24.27	36.18	0.4	0.3	0	-	0.0
9	24.26	36.16	0.1	1.4	1	0.0	0.4
23	24.26	36.15	1.6	0.1	2	0.7	0.6
47	23.53	36.36	0.4	0.3	-	0.3	0.8
70	22.38	36.81	1.8	0.4	3	-	1.2
93	20.27	36.57	1.8	0.4	4	0.5	-
140	17.63	36.37	2.8	0.8	14	1.2	0.1
186	15.21	36.04	1.2	1.2	2	0.2	0.5
232	13.64	35.81	1.7	1.3	19	1.6[a]	0.8
278	12.28	35.54	2.0	1.2	21	0.6	-
370	10.15	35.24	4.0	2.2	27	0.0	-
462	8.46	35.03	2.6	2.7	3	-	-
554	7.19	34.93	2.1	2.0	33	0.7	0.3
744	5.69	35.01	4.4	-	32	-	0.3
936	4.85	35.01	2.4	-	26	0.0	1.6
1134	4.41	35.08	1.8	1.6	10	1.2	0.3

*Values not used to draw smooth curves.
(a) Green carbohydrates.

STATION NO. 8-3C-31

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.23	36.15	24.47	0.5	0.0	2	0.4	0.1
10	24.26	36.15	24.46	0.2	1.4	1	0.1	0.4
20	24.26	36.15	24.46	1.3	0.4	2	0.5	0.6
30	24.25	36.17	24.48	1.3	0.2	2	0.6	0.7
50	23.24	36.40	24.95	0.6	0.3	3	0.3	0.9
75	22.02	36.81	25.61	1.8	0.4	3	0.4	1.1
100	19.90	36.53	25.98	1.9	0.5	5	0.6	0.7
150	17.08	36.32	26.53	2.5	0.9	11	1.0	0.2
200	14.74	35.97	26.79	1.4	1.2	7	0.6	0.6
250	13.25	35.70	26.90	1.8	1.3	20	1.2	0.8
300	11.74	35.47	27.02	2.5	1.4	22	0.5	0.7
400	9.45	35.18	27.20	3.5	2.4	19	0.1	0.5
500	7.80	34.98	27.31	2.4	2.4	15	0.5	0.4
600	6.77	34.92	27.41	2.7	2.0	33	0.6	0.3
700	5.96	34.98	27.56	3.9	1.9	32	0.4	0.3
800	5.39	35.02	27.66	3.8	1.8	30	0.2	0.7
1000	4.67	35.02	27.75	2.2	1.7	21	0.4	1.2

STATION NO. 8-30-32

DATE 26 (Day) 2 (Month) 1953 (Year) LAT. 26° 41.8' N. LONG. 90° 28.6' W.

TIME 2055 (GCT) DEPTH 1500 (Faths.) MAX. SAMPLE DEPTH 1188 (Meters) WIRE ANGLE 13°

WATER COLOR 00 (Code) WEATHER 02 (Code) SEA 3 (Code) SWELL 025 (Direction) ° T. 2 (Hgt.) ft.

6 (Period) sec. CLOUDS Sc (Type) 3 (Amount) TEMP. 69.7 (Dry) °F. 67.8 (Wet) °F.

BAR. 30.06 in. REL. HUM. 90 % WIND 025 (Direction) ° T. 3 (Force) VIS 7 (Code)

OBSERVED VALUES

Depth	Temp. °C.	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	20.74	36.45	0.6	0.2	1	0.0	0.2
2	*20.74	36.40	0.8	0.1	1	-	0.2
10	19.54	36.35	1.8	0.1	0	0.0	0.5
24	19.38	36.38	0.8	0.2	1	0.6	0.9
48	19.38	36.35	3.9	1.2	1	3.0	0.7
73	19.09	*36.94	3.4	0.2	0	0.2	0.2
97	19.06	36.74	1.8	0.8	1	0.2	0.7
146	15.89	36.17	1.4	1.2	3	1.0	0.5
194	14.14	35.88	1.3	1.2	16	0.0	0.2
243	12.40	35.62	3.2	2.2	20	0.4	0.8
292	11.11	35.43	1.7	2.0	23	0.3[a]	-
390	9.00	35.16	2.5	3.7	30	-	0.6
489	*8.72	35.03		1.7	29	0.1	1.6
589	6.54	34.85	4.4	2.2	33	0.4	0.1
789	5.36	34.92			32	0.8	-
988	4.61	34.96	1.9	1.8	24	0.4	0.3
1188	4.32	34.94		1.4	6	0.8[a]	0.1

*Values not used to draw smooth curves.
(a) Green carbohydrates.

STATION NO. 8-3C-32

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	20.74	36.45	25.69	0.6	0.2	1	0.0	0.2
10	19.54	36.35	25.94	1.8	0.1	0	0.0	0.5
20	19.38	36.38	26.00	1.1	0.2	1	0.4	0.8
30	19.40	36.38	25.99	1.6	0.4	1	1.2	0.8
50	19.38	36.35	25.97	3.9	1.1	1	2.8	0.7
75	19.08	36.71	26.33	3.3	0.2	0	0.2	0.2
100	19.05	36.74	26.36	1.8	0.8	1	0.2	0.7
150	15.69	36.09	26.68	1.4	1.2	4	0.9	0.5
200	13.86	35.85	26.89	1.5	1.3	16	0.0	0.3
250	12.20	35.59	27.03	3.0	2.2	20	0.4	0.8
300	10.91	35.40	27.12	1.8	2.1	24	0.3	0.7
400	8.86	35.15	27.28	2.6	3.5	30	0.2	0.7
500	7.47	35.01	27.38	3.5	1.8	29	0.1	1.4
600	6.49	34.84	27.38	4.3	2.2	33	0.4	0.1
700	5.82	34.84	27.47	3.7	2.2	32	0.6	0.2
800	5.30	34.92	27.60	3.1	2.2	31	0.8	0.4
1000	4.58	34.96	27.72		1.8	23	0.4	0.3

STATION NO. 8-3C-33

DATE 27 (Day) 2 (Month) 1953 (Year) LAT. 27° 03.0' N. LONG. 91° 02.0' W.

TIME 0310 (GCT) DEPTH 800 (Faths.) MAX. SAMPLE DEPTH 1200 (Meters) WIRE ANGLE 0 °

WATER COLOR 00 (Code) WEATHER 01 (Code) SEA 2 (Code) SWELL 340 (Direction) ° T. 2 (Hgt.) ft.

5 (Period) sec. CLOUDS Sc (Type) 4 (Amount) TEMP. 66.8 (Dry) °F. 64.5 (Wet) °F.

BAR. 30.11 in. REL. HUM. 85 % WIND 30 (Direction) ° T. 2 (Force) VIS. 7 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	19.85	36.36	0.9	0.1	1	1.1	0.7
2	*19.91	36.42	2.0	0.4	0	0.9	0.2
10	19.87	36.38	1.6	0.2	0	0.0	0.7
25	19.64	36.40	0.7	0.9	1	0.2	0.7
50	19.51	36.35	3.0	1.8	2	0.0	0.2
75	19.21	36.33	0.5	0.3	1	0.8	0.4
100	18.83	36.38	0.6	0.5	3	0.6	0.7
150	15.98	*36.83	1.0	3.1	14	-	0.5
200	13.86	35.84	4.0	1.3	17	-	1.3
250	12.33	35.68	2.7	1.4	20	-	2.2
300	10.74	35.32	0.0	1.3	31	0.2	0.4
400	8.82	35.16	2.4	2.7	33	1.3	-
500	7.28	---	2.6	2.0	26	-	0.1
600	6.35	34.88	2.6	2.4	13	1.4	-
800	5.22	34.92	2.6	2.4	-	0.4	0.7
1000	4.60	34.94	2.4	1.7	27	-	0.2
1200	4.28	34.94	2.4	1.8	20	0.6	0.9

*Values not used to draw smooth curves.

STATION NO. 8-3C-33

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	19.85	36.36	25.86	0.9	0.1	1	1.1	0.7
10	19.87	36.38	27.87	1.6	0.2	0	0.0	0.7
20	19.75	36.39	25.91	1.2	0.7	1	0.1	0.7
30	19.61	36.40	25.95	1.2	1.1	1	0.2	0.6
50	19.51	36.35	25.94	3.0	1.8	2	0.0	0.2
75	19.21	36.33	26.01	0.5	0.3	1	0.8	0.4
100	18.83	36.38	26.14	0.6	0.5	3	0.6	0.7
150	15.98	36.17	26.67	1.0	3.1	14	0.5	0.5
200	13.86	35.84	26.88	4.0	1.3	17	0.4	1.3
250	12.33	35.68	27.08	2.7	1.4	20	0.3	2.2
300	10.74	35.32	27.09	0.0	1.3	31	0.2	0.4
400	8.82	35.16	27.29	2.4	2.7	33	1.3	0.3
500	7.28	34.90	27.32	2.6	2.0	26	1.3	0.1
600	6.35	34.88	27.43	2.6	2.4	13	1.4	0.3
700	5.74	34.88	27.51	2.6	2.4	17	0.9	0.5
800	5.22	34.92	27.60	2.6	2.4	20	0.4	0.7
1000	4.60	34.94	27.69	2.4	1.7	27	0.5	0.2
1200	4.28	34.94	27.73	2.4	1.8	20	0.6	0.9

STATION NO. 8-3C-34

DATE 27 (Day) 2 (Month) 1953 (Year) LAT. 27° 28.0' N. LONG. 91° 45.0' W.

TIME 1050 (GCT) DEPTH 470 (Faths.) MAX. SAMPLE DEPTH 800 (Meters) WIRE ANGLE 0 °

WATER COLOR 10 (Code) WEATHER 02 (Code) SEA 0 (Code) SWELL 70 (Direction) ° T. 1 (Hgt.) ft.

4 (Period) sec. CLOUDS St (Type) 8 (Amount) TEMP. 67.0 (Dry) °F. 64.7 (Wet) °F.

BAR. 30.06 in. REL. HUM 90 % WIND - (Direction) ° T. 0 (Force) VIS. 7 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	19.52	36.31	0.8	0.2	1	0.4	0.4
2	19.58	36.36	0.2	-	1	0.3	-
10	19.56	36.29	0.4	0.3	2	0.4	0.1
20	19.31	36.42	0.4	0.1	1	0.6	0.5
30	19.25	36.40	0.4	0.2	2	-	-
50	19.06	36.40	0.5	0.3	2	0.3	0.3
75	18.93	36.33	0.6	0.4	2	0.3	0.2
100	18.87	36.31	0.2	0.3	2	0.4	0.4
150	15.75	36.15	0.8	1.0	10	0.8	0.8
200	14.00	35.81	3.5	1.2	20	0.2	0.5
250	12.59	*36.00	1.6	1.4	24	-	0.4
300	11.26	35.39	2.3	1.4	23	0.5	0.2
400	9.27	35.14	2.3	2.0	33	0.0	0.2
500	7.76	35.01	0.6	2.2	29	-	0.2
600	6.48	34.96	2.4	2.0	30	0.4	1.2
800	5.36	34.90	2.1	2.4	26	1.6	0.7

*Values not used to draw smooth curves.

STATION NO. 8-3C-34

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	19.52	36.31	25.91	0.8	0.2	1	0.4	0.4
10	19.56	36.29	25.88	0.4	0.3	2	0.4	0.1
20	19.31	36.42	26.05	0.4	0.1	1	0.6	0.5
30	19.25	36.40	26.05	0.4	0.2	2	0.5	0.4
50	19.06	36.40	26.10	0.5	0.3	2	0.3	0.3
75	18.93	36.33	26.08	0.6	0.4	2	0.3	0.2
100	18.87	36.31	26.08	0.2	0.3	2	0.4	0.4
150	15.75	36.15	26.71	0.8	1.0	10	0.8	0.8
200	14.00	35.81	26.83	3.5	1.2	20	0.2	0.5
250	12.59	35.56	26.94	1.6	1.4	24	0.4	0.4
300	11.26	35.39	27.05	2.3	1.4	23	0.5	0.2
400	9.27	35.14	27.20	2.3	2.0	33	0.0	0.2
500	7.76	35.01	27.34	0.6	2.2	29	0.2	0.2
600	6.48	34.96	27.48	2.4	2.0	30	0.4	1.2
700	5.88	34.92	27.52	2.3	2.2	28	1.0	0.9
800	5.36	34.90	27.57	2.1	2.4	26	1.6	0.7

STATION NO. 8-3C-35

DATE 27 (Day) 2 (Month) 1953 (Year) LAT. 28° 10.0' N. LONG. 92° 52.0' W.

TIME 2038 (GCT) DEPTH 38 (Faths.) MAX. SAMPLE DEPTH 60 (Meters) WIRE ANGLE 0 °

WATER COLOR 10 (Code) WEATHER 03 (Code Cu) SEA 1 (Code) SWELL - (Direction) ° T. 0 (Hgt.) ft.

-- (Period) sec. CLOUDS Ac (Type) 6 (Amount) TEMP. 68.6 °F. (Dry) 65.9 °F. (Wet)

BAR. 30.02 in. REL. HUM. 85 % WIND 200 (Direction) °T. 1 (Force) VIS. 7 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	19.78	36.29	0.2	0.4	0	0.0	0.0
2	19.81	36.29	1.7	0.7	1	0.0	0.0
10	19.52	36.36	0.4	0.2	1	0.0	1.2
20	19.52	36.33	0.4	0.2	0	0.0	1.6
40	18.97	36.31		0.2	1	1.0	0.3
50	18.60	36.29	0.4	0.2	1	0.0	1.3

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	19.78	36.29	25.82	0.2	0.4	0	0.0	0.0
10	19.52	36.36	25.95	0.4	0.2	1	0.0	1.2
20	19.52	36.33	25.92	0.4	0.2	0	0.0	1.6
30	19.28	36.32	25.98	0.4	0.2	1	0.5	1.0
50	18.77	36.30	26.10	0.4	0.2	1	0.0	1.3

STATION NO. 8-3C-36

DATE 28 (Day) 2 (Month) 1953 (Year) LAT. 28° 47.0' N. LONG. 93° 44.0' W.

TIME 0311 (GCT) DEPTH 12 (Faths.) MAX. SAMPLE DEPTH 20 (Meters) WIRE ANGLE 0 °

WATER COLOR 10 (Code) WEATHER 01 (Code) SEA 1 (Code) SWELL - (Direction) ° T. 0 ft. (Hgt.)

- (Period) sec. CLOUDS -- (Type) 0 (Amount) TEMP. 64.1 (Dry) °F. 63.6 (Wet) °F.

BAR. 30.00 in. REL. HUM. 100 WIND 180 (Direction) °T. 2 (Force) VIS 7 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	16.46	36.24	0.5	1.3	0	0.0	0.2
2	16.50	36.24	0.2	0.4	1	1.3	0.5
10	16.14	36.18	0.7	0.3	0	0.6	1.1
20	16.02	36.15	0.3	0.2	1	0.3	0.4

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	16.46	36.24	26.61	0.5	1.3	0	0.0	0.2
10	16.14	36.18	26.64	0.7	0.3	0	0.6	1.1
20	16.02	36.15	26.65	0.3	0.2	1	0.3	0.4

Figure 21.--Locations of stations occupied on Cruise 10-2B.

STATION NO. 10-2B-3

DATE 15 (Day) 4 (Month) 1953 (Year) LAT. 26° 48.0' N. LONG. 97° 05.5' W.

TIME 2245 (GCT) DEPTH 16 (Faths.) MAX. SAMPLE DEPTH 22 (Meters) WIRE ANGLE 0 °

WATER COLOR 40 (Code) WEATHER 01 (Code) SEA 1 (Code) SWELL 120 (Direction) ° T. 2 (Hgt.) ft.

4 (Period) sec. CLOUDS Ci (Type) 1 (Amount) TEMP. 76.5 (Dry) °F. 74.5 (Wet) °F.

BAR. 29.83 in. REL. HUM. 91 % WIND 100 (Direction) ° T. 1 (Force) VIS. 6 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	22.81	29.56	0.4	0.3	0	0.6	0.1
10	21.97	29.69	0.6	-	3	0.6	0.0
22	21.10	31.74	1.0	0.7	2	1.0	0.7

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	22.81	29.56	19.90	0.4	0.3	0	0.6	0.1
10	21.97	29.69	20.23	0.6	0.5	3	0.6	0.0
20	21.23	31.25	21.61	0.9	0.7	2	0.9	0.6

STATION NO. 10-2B-4

DATE 16 (Day) 4 (Month) 1953 (Year) LAT. 26° 08.5' N. LONG. 97° 08.0' W.

TIME 0323 (GCT) DEPTH 9 (Faths.) MAX. SAMPLE DEPTH 10 (Meters) WIRE ANGLE 0 °

WATER COLOR 40 (Code) WEATHER 44 (Code) SEA 1 (Code) SWELL - (Direction) ° T. - (Hgt.) ft.

- (Period) sec. CLOUDS - (Type) F09 (Amount) TEMP. 74.4 (Dry) °F. 73.1 (Wet) °F.

BAR. 29.88 in. REL. HUM. 95 % WIND 140 (Direction) ° T. 1 (Force) VIS. 3 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	23.14	30.32	0.8	0.3	0	0.8	0.5
10	22.99	32.18	0.7	0.5	0	0.0	0.3

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	23.14	30.32	20.38	0.8	0.3	0	0.8	0.5
10	22.99	32.18	21.82	0.7	0.5	0	0.0	0.3

STATION NO. 10-2B-5

DATE 16 4 1953 LAT. 25° 30.0' N. LONG. 97° 05.0' W.
Day Month Year

TIME 0859 DEPTH 15 MAX. SAMPLE DEPTH 25 WIRE ANGLE 0 °
GCT Faths. Meters

WATER COLOR 40 WEATHER 44 SEA 1 SWELL - ° T. - ft.
Code Code Code Direction Hgt.

- sec. CLOUDS - Fog TEMP. 73.8 °F. 72.4 °F.
Period Type Amount Dry Wet

BAR. 29.95 in. REL. HUM. 91 % WIND 20 ° T. 1 VIS. 3
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	22.78	33.62	0.7	0.6	0	0.6	0.0
10	22.15	33.44	-	0.4	0	0.6	0.3
25	22.48	33.89	0.5	0.5	0	0.3	0.2

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	22.78	33.62	22.97	0.7	0.6	0	0.6	0.0
10	22.15	33.44	23.01	0.6	0.4	0	0.6	0.3
20	22.20	33.64	23.15	0.5	0.5	0	0.4	0.2

STATION NO. 10-2B-6

DATE 16 4 1953 (Day Month Year) LAT. 24° 55.0' N. LONG. 97° 10.0' W.

TIME 1320 (GCT) DEPTH 28 (Faths.) MAX. SAMPLE DEPTH 50 (Meters) WIRE ANGLE 0 °

WATER COLOR 10 (Code) WEATHER 02 (Code) SEA 1 (Code) SWELL 30 ° (Direction) T. 3 (Hgt.) ft.

4 (Period) sec. CLOUDS Cu (Type) 8 (Amount) TEMP. 75.3 °F. (Dry) 72.8 °F. (Wet)

BAR. 30.00 in. REL. HUM. 91 % WIND 25 ° (Direction) T. 3 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.28	36.45	0.5	0.4	0	0.6	0.3
10	24.28	36.60	0.6	0.2	0	0.0	1.1
25	23.96	36.51	0.3	0.0	0	0.4	0.0
50	21.38	36.40	0.5	0.5	1	0.0	0.0

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.28	36.45	24.67	0.5	0.4	0	0.6	0.3
10	24.28	36.60	24.79	0.6	0.2	0	0.0	1.1
20	24.17	36.54	24.78	0.4	0.1	0	0.3	0.4
30	23.65	36.48	24.88	0.3	0.1	0	0.3	0.0
50	21.38	36.40	25.47	0.5	0.5	1	0.0	0.0

STATION NO. 10-2B-7

DATE 16 4 1953 (Day Month Year) LAT. 24° 14.0' N. LONG. 97° 21.0' W.

TIME 1741 DEPTH 35 MAX. SAMPLE DEPTH 50 (Meters) WIRE ANGLE 0 °

WATER COLOR 10 (Code) WEATHER 02 (Code) SEA 2 (Code) SWELL 010 (Direction) ° T. 3 (Hgt.) ft.

3 (Period) sec. CLOUDS Ac,Cu (Type) 7 (Amount) TEMP. 76.3 (Dry) °F. 73.5 (Wet) °F.

BAR. 30.05 in. REL. HUM. 91 % WIND 030 (Direction) ° T. 3 (Force) VIS. 7 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.32	36.44	1.3	0.8	0	0.4	0.0
10	24.15	36.53	0.9	0.2	0	3.5	0.0
25	22.19	36.47	0.5	0.3	0	0.2	0.0
50	19.95	36.67	1.2	1.0	8	0.0	0.3

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.32	36.44	24.66	1.3	0.8	0	0.4	0.0
10	24.15	36.53	24.77	0.9	0.2	0	3.5	0.0
20	22.79	36.48	25.14	0.6	0.3	0	1.3	0.0
30	21.64	36.48	25.46	0.6	0.5	2	0.2	0.1
50	19.95	36.67	26.07	1.2	1.0	8	0.0	0.3

STATION NO. 10-2B-8

DATE 16 (Day) 4 (Month) 1953 (Year) LAT. 23° 40.0' N. LONG. 97° 35.0' W.

TIME 2154 DEPTH 22 MAX. SAMPLE DEPTH 40 (Meters) WIRE ANGLE 5 °

WATER COLOR 10 (Code) WEATHER 02 (Ci) SEA 1 (Code) SWELL 080 (Direction) ° T. 3 (Hgt.) ft.

5 sec. (Period) CLOUDS Cs.Cu (Type) 8 (Amount) TEMP. 77.5 °F. (Dry) 73.1 °F. (Wet)

BAR. 29.94 in. REL. HUM. 79 % WIND 080 (Direction) ° T. 3 (Force) VIS. 7 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.77	36.74	0.2	0.1	0	0.0	0.0
10	24.35	36.49	0.4	0.1	0	0.0	0.2
25	23.92	36.51	0.3	0.3	0	0.0	0.0
40	22.60	36.60	0.5	0.4	0	0.0	0.2

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	24.77	36.74	24.75	0.2	0.1	0	0.0	0.0
10	24.35	36.49	24.68	0.4	0.1	0	0.0	0.2
20	24.16	36.50	24.75	0.3	0.2	0	0.0	0.1
30	23.58	36.53	24.94	0.4	0.3	0	0.0	0.1

STATION NO. 10-2B-9

DATE 17 4 1953 LAT. 22° 57.0' N. LONG. 97° 35.0' W.
Day Month Year

TIME 0240 DEPTH 25 MAX. SAMPLE DEPTH 39 WIRE ANGIE 10 °
GCT Faths. Meters

WATER COLOR 10 WEATHER 02 SEA 2 SWELL 090 ° T. 3 ft.
Code Code Code Direction Hgt.

6 sec. CLOUDS Cs 8 TEMP. 78.0 °F. 74.1 °F.
Period Type Amount Dry Wet

BAR. 29.94 in. REL. HUM. 83 % WIND 090 ° T. 3 VIS. 7
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.26	36.45	0.5	0.2	0	0.8	0.0
10	25.25	36.47	0.8	0.3	3	0.6	0.1
25	24.36	36.42	0.6	0.2	0	0.0	-
39	21.99	36.45	1.0	0.4	0	-	0.6

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.26	36.45	24.38	0.5	0.2	0	0.8	0.0
10	25.25	36.47	24.40	0.8	0.3	3	0.6	0.1
20	24.85	36.43	24.49	0.7	0.2	1	0.2	0.3
30	23.68	36.42	24.83	0.7	0.3	0	-	0.4

STATION NO. 10-2B-10

DATE 17 4 1953 (Day Month Year) LAT. 22° 20.0' N. LONG. 97° 24.0' W.

TIME 0726 (GCT) DEPTH --- (Faths.) MAX. SAMPLE DEPTH 50 (Meters) WIRE ANGLE 3 °

WATER COLOR 30 (Code) WEATHER 02 (Code) SEA 1 (Code) SWELL 100 ° (Direction) T. 2 ft. (Hgt.)

5 sec. (Period) CLOUDS Cs (Type) 8 (Amount) TEMP. 77.9 °F. (Dry) 73.2 °F. (Wet)

BAR. 29.90 in. REL. HUM. 83 % WIND 100 ° (Direction) T.3 (Force) VIS.7 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.68	36.49	0.6	0.3	1	0.0	0.0
10	25.67	36.47	1.1	0.2	0	0.2	0.2
25	24.06	36.45	0.3	0.3	0	0.2	0.8
50	22.07	36.45	0.4	0.2	0	0.0	0.0

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.68	36.49	24.28	0.6	0.3	1	0.0	0.0
10	25.67	36.47	24.27	1.1	0.2	0	0.2	0.2
20	24.56	36.46	24.60	0.6	0.3	0	0.2	0.6
30	23.59	36.45	24.88	0.3	0.3	0	0.2	0.6
50	22.07	36.45	25.32	0.4	0.2	0	0.0	0.0

STATION NO. 10-2B-11

DATE 17 4 1953 LAT. 21° 29.0' N. LONG. 97° 10.0' W.
Day Month Year

TIME 1445 DEPTH -- MAX. SAMPLE DEPTH 40 WIRE ANGLE 6 °
GCT Faths.

WATER COLOR 10 WEATHER 02 SEA 1 SWELL 110 ° T. 2 ft.
Code Code Code Direction Hgt.

4 sec. CLOUDS Sc 8 TEMP. 77.4 °F. 76.4 °F.
Period Type Amount Dry Wet

BAR. 29.84 in. REL. HUM. 96 % WIND 185 ° T. 2 VIS. 7
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.85	36.44	0.8	0.1	0	0.0	0.0
10	25.85	36.36	0.9	0.3	0	0.7	1.0
25	23.31	36.45	0.5	0.3	1	0.6	2.5
40	21.98	36.66	0.7	0.4	0	0.8	4.0

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.85	36.44	24.19	0.8	0.1	0	0.0	0.0
10	25.85	36.36	24.13	0.9	0.3	0	0.7	1.0
20	24.02	36.41	24.72	0.6	0.3	1	0.6	2.0
30	22.73	36.51	25.18	0.6	0.3	1	0.7	3.0

STATION NO. 10-2B-12

ATE 17 4 1953 LAT. 20° 59.0 ' N. LONG. 97 03.5' W.
Day Month Year

IME 1854 DEPTH 26 MAX. SAMPLE DEPTH 35 WIRE ANGLE 0 °
GCT Faths. Meters

ATER COLOR 10 WEATHER 01 SEA 1 SWELL 70 ° T. 2 ft.
Code Code Code Direction Hgt.

4 sec. CLOUDS Cu 6 TEMP. 81.4 °F. 77.8 °F.
eriod Type Amount Dry Wet

AR. 29.78 in. REL. HUM. 84 % WIND 90 ° T. 3 VIS. 7
Direction Force Code

OBSERVED VALUES

epth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.27	36.40	0.7	0.2	0	0.0	0.2
10	25.77	36.38	0.8	0.3	0	-	0.1
20	23.39	36.65	0.6	0.3	1	0.0	0.2
35	22.37	36.45	0.4	0.2	1	-	0.1

VALUES AT STANDARD DEPTHS

epth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.27	36.40	24.03	0.7	0.2	0	0.0	0.2
10	25.77	36.38	24.17	0.8	0.3	0	0.0	0.1
20	23.39	36.65	25.09	0.6	0.3	1	0.0	0.2
30	22.37	36.60	25.35	0.5	0.2	1	-	0.1

STATION NO. 10-2B-13

DATE 18 (Day) 4 (Month) 1953 (Year) LAT. 20° 27.0' N. LONG. 96° 40.0' W.

TIME 0038 (GCT) DEPTH 50 (Faths.) MAX. SAMPLE DEPTH 90 (Meters) WIRE ANGLE 0 °

WATER COLOR 10 (Code) WEATHER 02 (Code) SEA 1 (Code) SWELL 090 (Direction) ° T. 3 (Hgt.) ft.

4 (Period) sec. CLOUDS Ac (Type) 6 (Amount) TEMP. 79.8 (Dry) °F. 77.2 (Wet) °F.

BAR. 29.69 in. REL. HUM. 87 % WIND 090 (Direction) ° T. 3 (Force) VIS. 7 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.31	36.26	0.5	0.3	0	0.6	0.2
10	25.94	36.31	0.7	0.5	2	0.0	0.1
25	22.41	36.45	0.6	0.6	0	0.8	0.0
50	21.66	36.67	0.5	0.4	0	0.6	-
70	21.07	36.60	0.8	0.4	3	0.0	0.4
90	20.01	36.47	0.6	0.6	10	0.2	0.3

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.31	36.26	23.91	0.5	0.3	0	0.6	0.2
10	25.94	36.31	24.06	0.7	0.5	2	0.0	0.1
20	23.33	36.40	24.92	0.6	0.6	1	0.5	0.0
30	22.26	36.52	25.32	0.6	0.6	0	0.8	0.0
50	21.66	36.67	25.60	0.5	0.4	0	0.6	0.2
75	20.85	36.57	25.75	0.7	0.5	5	0.1	0.4

STATION NO. 10-2B-14

DATE 18 4 1953 LAT. 19° 57.0' N. LONG. 96° 21.0' W.
Day Month Year

TIME 0441 DEPTH 70 MAX. SAMPLE DEPTH 98 WIRE ANGLE 12 °
GCT Faths. Meters

WATER COLOR 10 WEATHER 00 SEA 2 SWELL 130 ° T. 3 ft.
Code Code Code Direction Hgt.

-- sec. CLOUDS -- 0 TEMP. 80.0 °F. 77.0 °F.
Period Type Amount Dry Wet

BAR. 29.72 in. REL. HUM. 87 % WIND 130 ° T. 4 VIS. 7
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.86	36.35	0.6	0.2	0	0.6	0.2
10	25.86	36.35	0.6	0.2	0	0.2	0.4
25	24.43	36.29	0.4	0.2	0	0.0	0.1
49	22.46	36.45	1.2	0.4	0	0.0	0.4
74	19.65	36.47	1.7	0.8	9	0.0	0.0
98	18.88	36.53	1.2	0.9	14	0.2	0.3

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.86	36.35	24.12	0.6	0.2	0	0.6	0.2
10	25.86	36.35	24.12	0.6	0.2	0	0.2	0.4
20	24.89	36.30	24.38	0.5	0.2	0	0.1	0.2
30	24.08	36.33	24.64	0.6	0.2	0	0.0	0.2
50	22.31	36.45	25.25	1.2	0.4	0	0.0	0.4
75	19.58	36.47	26.01	1.7	0.8	9	0.0	0.0

STATION NO. 10-2B-15

DATE 18 4 1953 LAT. 20° 40.0' N. LONG. 95° 55.5' W.
Day Month Year

TIME 1320 DEPTH 1000 MAX. SAMPLE DEPTH 759 WIRE ANGLE 40 °
GCT Faths. Meters

WATER COLOR 10 WEATHER 01 SEA 2 SWELL 155 ° T. 4 ft.
Code Code Code Direction Hgt.

3 sec. CLOUDS Cs 6 TEMP. 80.9 °F. 78.0 °F.
Period Type Amount Dry Wet

BAR. 29.72 in. REL. HUM. 91 % WIND 110 ° T. 4 VIS. 7
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	*21.19	36.55	0.1	0.2	0	0.0	0.4
8	26.06	36.40	0.3	0.2	2	-	0.8
18	26.07	36.42	0.3	0.2	0	0.6	0.1
38	24.30	36.40	0.2	0.1	1	0.0	0.0
56	22.86	36.51	0.2	0.7	1	-	0.3
76	22.05	36.44	0.2	0.3	0	0.3	0.8
112	19.05	36.44	0.6	0.5	10	1.6[a]	0.2
150	18.64	36.20	0.9	0.6	13	0.0[a]	0.1
187	15.43	36.04	0.7	0.7	17	0.0[a]	0.2
222	8.96	35.81	1.5	1.2	23	1.3[a]	0.1
294	11.85	35.39	1.8	1.6	23	0.0	0.1
364	10.40	35.25	2.0	1.8	31	0.2	0.2
437	9.36	35.14	2.0	2.0	30	0.0	0.0
---	*11.12	*35.30	2.2	1.8	25	0.4	0.1
535	7.54	34.96	1.9	1.8	32	0.0	0.0
759	5.65	34.90	1.7	1.7	38	0.7	0.7

* Values not used in drawing smooth curves.
(a) Green carbohydrates.

STATION NO. 10-2B-15

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	*21.19	36.55	25.64	0.1	0.2	0	0.0	0.4
10	26.11	36.41	24.08	0.3	0.2	2	0.3	0.7
20	25.88	36.41	24.16	0.3	0.2	0	0.5	0.1
30	24.99	36.39	24.41	0.2	0.1	1	0.2	0.0
50	23.27	36.49	25.00	0.2	0.1	1	0.1	0.2
75	22.10	36.44	25.30	0.2	0.3	0	0.3	0.8
100	19.77	36.46	25.95	0.5	0.4	7	1.2	0.4
150	18.64	36.20	26.05	0.9	0.6	13	0.0	0.1
200	12.43	35.95	27.26	1.0	0.9	19	0.5	0.2
250	10.61	35.61	27.34	1.6	1.4	23	0.8	0.1
300	11.71	35.38	26.96	1.8	1.6	24	0.0	0.1
400	9.92	35.20	27.14	2.0	1.9	31	0.1	0.1
500	8.12	35.01	27.28	1.8	1.8	33	0.2	0.2
600	6.67	34.89	27.40	1.7	1.7	37	0.5	0.5

*Values not used to draw smooth curves.

STATION NO. 10-2B-16

DATE 18 (Day) 4 (Month) 1953 (Year) LAT. 21° 41.0'N. LONG. 96° 00.0' W.
TIME 1944 (GCT) DEPTH 1200 (Faths.) MAX. SAMPLE DEPTH 1203 (Meters) WIRE ANGLE 30 °
WATER COLOR 10 (Code) WEATHER 02 (Code) SEA 2 (Code) SWELL 170 (Direction) ° T. 6 (Hgt.) ft.
3 (Period) sec. CLOUDS Haze (Type) - (Amount) TEMP. 81.9 (Dry) °F. 79.0 (Wet) °F.
BAR. 29.70 in. REL. HUM. 88 % WIND 150 (Direction) ° T. 4 (Force) VIS. 7 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.29	36.47	0.2	0.2	0	0.3	0.1
9	26.28	36.62	0.4	0.4	0	0.1	0.3
22	26.18	36.45	0.8	0.4	0	2.1	1.2
43	23.69	36.49	0.4	0.2	0	0.0	0.1
63	23.08	36.49	1.6	0.6	26	0.0	0.0
83	22.14	*37.00	0.3	0.3	4	0.0	0.8
124	19.13	36.42	1.2	0.7	10	-	0.2
164	17.34	36.26	1.0	1.0	14	0.8	0.0
244	14.06	35.81	0.8	0.8	0	0.0	0.1
322	11.54	35.43	1.4	1.4	24	1.2	0.0
392	9.54	35.17	2.2	2.1	25	-	0.0
458	8.12	35.03	2.4	2.7	28	0.2	-
592	6.31	34.92	2.1	2.1	25	-	0.8
745	5.28	34.88	2.4	2.8	8	0.0	0.4
918	4.68	34.96	2.2	1.8	25	0.0	-
1203	4.23	35.05	1.3	1.3	23	0.6	0.0

*Values not used to draw smooth curves.

STATION NO. 10-2B-16

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.29	36.47	24.07	0.2	0.2	0	0.3	0.1
10	26.31	36.60	24.16	0.4	0.4	0	0.3	0.4
20	26.27	36.47	24.08	0.7	0.4	0	1.8	1.1
30	25.01	36.47	24.47	0.6	0.3	0	1.3	0.8
50	23.51	36.42	24.88	0.8	0.3	9	0.0	0.1
75	22.56	36.92	25.54	0.8	0.4	13	0.0	0.5
100	20.75	36.75	25.91	0.7	0.5	6	0.2	0.6
150	17.96	36.32	26.31	1.1	0.9	13	0.7	0.1
200	15.78	36.05	26.62	0.9	0.9	8	0.4	0.0
250	13.86	35.78	26.84	0.8	0.8	2	0.1	0.1
300	12.22	35.53	26.98	1.2	1.2	17	0.9	0.0
400	9.35	35.15	27.20	2.2	2.2	25	0.6	0.0
500	7.46	34.99	27.37	2.3	2.5	27	0.2	0.4
600	6.24	34.92	27.48	2.1	2.1	24	0.1	0.8
800	5.06	34.91	27.62	2.3	2.5	13	0.0	0.4
1000	4.48	34.99	27.75	1.9	1.7	24	0.2	0.2
1200	4.23	35.05	27.82	1.3	1.3	23	0.6	0.0

STATION NO. 10-2B-17

DATE 19 (Day) 4 (Month) 1953 (Year) LAT. 22° 21.0' N. LONG. 96° 00.0' W.

TIME 0153 (GCT) DEPTH 1400 (Faths.) MAX. SAMPLE DEPTH 1712 (Meters) WIRE ANGLE 8 °

WATER COLOR 00 (Code) WEATHER 02 (Code) SEA 1 (Code) SWELL 170 (Direction) ° T. 2 (Hgt.) ft.

8 (Period) sec. CLOUDS -- (Type) --- (Amount) TEMP. 80.3 (Dry) °F. 78.1 (Wet) °F.

BAR. 29.74 in. REL. HUM. 91 % WIND -- (Direction) ° T. 1 (Force) VIS. 7 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.19	36.42	0.3	0.2	0	0.2	0.1
10	26.19	36.40	1.1	1.1	0	0.2	-
24	26.03	36.40	0.3	0.1	0	0.8	0.9
49	23.31	36.35	1.7	1.0	0	0.2	0.0
73	22.73	36.47	0.4	0.5	0	0.4	0.0
98	21.99	36.51	0.7	0.7	0	-	0.2
147	18.49	36.58	1.3	0.7	12	0.0	0.6
195	16.03	36.18	0.8	0.8	15	0.0	0.1
293	12.14	35.70	1.6	1.4	22	-	0.0
390	9.92	35.19	1.6	1.5	27	0.0	0.0
486	8.19	35.03	2.2	2.0	32	-	0.1
583	6.92	34.97	2.0	2.0	29	1.0	0.1
864	4.94	34.97	2.1	2.0	28	0.1	0.0
1140	4.32	34.96	2.2	1.9	--	0.1	0.0
1420	4.18	34.99	1.8	1.8	24	0.4	0.7
1712	4.14	35.07	0.8	1.6	22	0.6	0.2

STATION NO. 10-2B-17

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	26.19	36.42	24.07	0.3	0.2	0	0.2	0.1
10	26.19	36.40	24.05	1.1	1.1	0	0.2	0.4
20	26.18	36.40	24.05	0.5	0.4	0	0.6	0.8
30	25.18	36.37	24.34	0.6	0.3	0	0.7	0.7
50	23.29	36.36	24.90	1.6	0.9	0	0.2	0.0
75	22.70	36.47	25.15	0.4	0.5	0	0.4	0.0
100	21.83	36.52	25.44	0.7	0.7	0	0.3	0.2
150	18.33	36.55	26.39	1.3	0.7	12	0.0	0.6
200	15.79	36.16	26.71	0.8	0.8	15	0.0	0.1
250	13.64	35.91	26.98	1.2	1.1	19	0.0	0.0
300	11.96	35.65	27.12	1.6	1.4	22	0.0	0.0
400	9.72	35.17	27.15	1.7	1.6	28	0.1	0.0
500	7.99	35.02	27.31	2.2	2.0	32	0.6	0.1
600	6.76	34.97	27.45	2.0	2.0	29	0.9	0.1
800	5.27	34.97	27.64	2.1	2.0	28	0.3	0.0
1000	4.57	34.96	27.71	2.1	2.0	27	0.1	0.0
1200	4.28	34.96	27.75	2.1	2.0	26	0.2	0.2
1500	4.16	35.01	27.80	1.5	1.7	23	0.5	0.6

STATION NO. 10-2B-18

DATE 19 (Day) 4 (Month) 1953 (Year) LAT. 23° 01.0' N. LONG. 96° 00.0' W.

TIME 0805 (GCT) DEPTH 1400 (Faths.) MAX. SAMPLE DEPTH 1651 (Meters) WIRE ANGLE 13 °

WATER COLOR 10 (Code) WEATHER 02 (Code) SEA 1 (Code) SWELL 070 (Direction) ° T. 3 (Hgt.) ft.

5 (Period) sec. CLOUDS -- (Type) -- (Amount) TEMP. 79.6 (Dry) °F. 77.7 (Wet) °F.

BAR. 29.87 in. REL. HUM. 91 % WIND 050 (Direction) ° T. 3 (Force) VIS. 7 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.97	36.51	0.5	0.3	0	1.2	0.1
10	25.98	36.47	0.5	0.2	0	0.7	0.4
24	25.85	36.47	0.4	0.4	0	0.0	0.2
48	23.79	36.45	0.4	0.0	0	1.1	0.1
71	22.69	36.44	0.2	0.1	20	0.5	0.0
94	22.10	36.42	0.4	0.3	1	0.1	0.6
138	19.91	36.44	0.7	0.4	8	0.2	0.1
180	17.09	36.23	1.8	0.9	14	0.0	0.2
268	13.35	35.68	1.5	1.2	20	0.4	0.0
357	10.91	35.35	1.4	1.4	24	1.6	-
447	9.25	---	2.2	1.9	27	0.1	0.6
537	8.02	34.99	2.5	2.5	32	0.2	0.2
808	5.50	*35.12	2.7	2.2	30	0.0	0.4
1082	4.61	34.97	2.3	2.3	26	0.4	0.2
1362	4.24	34.97	2.0	2.4	0	0.0	0.1
1651	4.17	34.97	1.6	1.6	20	1.0	0.1

* Values not used to draw smooth curves.

STATION NO. 10-2B-18

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.97	36.51	24.20	0.5	0.3	0	1.2	0.1
10	25.98	36.47	24.17	0.5	0.2	0	0.7	0.4
20	25.97	36.47	24.17	0.4	0.4	0	0.0	0.2
30	25.25	36.46	24.39	0.4	0.3	0	0.4	0.2
50	23.67	36.45	24.86	0.4	0.0	2	1.0	0.1
75	22.61	36.44	25.16	0.2	0.1	17	0.4	0.1
100	21.85	36.44	25.37	0.4	0.3	2	0.1	0.5
150	19.04	36.38	26.08	1.0	0.5	10	0.1	0.1
200	16.12	36.09	26.58	1.7	1.0	15	0.1	0.2
250	14.01	35.77	26.80	1.6	1.1	19	0.3	0.0
300	12.38	35.55	26.96	1.5	1.3	21	0.8	0.1
400	10.06	35.23	27.14	1.8	1.6	25	0.9	0.4
500	8.50	35.03	27.24	2.4	2.4	30	0.2	0.4
600	7.29	35.04	27.43	2.5	2.4	32	0.2	0.2
800	5.55	35.12	27.73	2.7	2.2	30	0.0	0.4
1000	4.82	35.00	27.72	2.4	2.3	27	0.3	0.3
1200	4.42	34.97	27.74	2.2	2.4	15	0.2	0.2
1500	4.17	34.97	27.77	1.8	2.0	10	0.5	0.1

STATION NO. 10-2B-23

DATE 20 4 1953 LAT. 25° 51.0'N. LONG. 96° 00.0' W.
Day Month Year

TIME 1948 DEPTH 530 MAX. SAMPLE DEPTH 742 WIRE ANGLE 12 °
GCT Faths. Meters

WATER COLOR 10 WEATHER 02 SEA 3 SWELL 020 ° T. 6 ft.
Code Code Code Direction Hgt.

6 sec. CLOUDS Cu 5 TEMP. 68.4 °F. 60.1 °F.
Period Type Amount Dry Wet

BAR. 30.27 in. REL. HUM. 62 % WIND 350 ° T. 4 VIS. 8
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	23.05	36.44	0.7	0.6	0	0.0	0.1
10	23.06	---	0.2	0.0	0	0.0	-
19	23.08	36.40	0.9	0.5	0	0.4	0.2
28	23.10	36.53	1.0	0.7	0	-	0.2
46	20.72	36.47	0.3	0.3	0	0.0	0.3
67	20.08	36.35	0.3	0.1	20	1.2	0.2
90	18.29	36.45	0.4	0.4	8	0.0	0.3
134	15.76	36.22	1.2	0.9	14	0.0	0.8
179	14.16	36.00	1.1	1.1	18	0.4	0.2
224	12.79	35.68	0.7	0.9	22	-	0.1
270	11.66	35.48	1.9	1.5	0	0.0	0.4
361	9.86	35.39	1.6	2.5	25	1.2	0.1
453	8.39	35.08	2.4	2.0	27	0.0	0.2
547	7.34	34.97	2.2	2.0	28	1.4	0.4
742	5.85	34.94	2.1	2.0	27	0.8	0.1

STATION NO. 10-2B-23

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	23.05	34.44	23.52	0.7	0.6	0	0.0	0.1
10	23.06	35.76	24.51	0.2	0.0	0	0.0	0.2
20	23.12	36.42	24.99	0.9	0.4	0	0.4	0.2
30	22.75	36.53	25.19	0.9	0.0	0	0.2	0.2
50	20.67	36.43	25.69	0.3	0.3	4	0.2	0.3
75	19.42	36.40	26.00	0.3	0.2	16	0.8	0.2
100	17.63	36.40	26.45	0.5	0.5	9	0.0	0.4
150	15.16	36.15	26.84	1.2	1.0	15	0.1	0.6
200	13.49	35.84	26.96	0.9	1.0	20	0.3	0.2
250	12.13	35.55	27.01	1.4	1.2	10	0.1	0.3
300	11.03	35.47	27.15	1.8	1.8	8	0.4	0.3
400	9.18	35.23	27.29	1.9	2.3	26	0.7	0.1
500	7.84	35.02	27.33	2.3	2.0	28	0.7	0.3
600	6.84	34.94	27.41	2.2	2.0	28	1.2	0.3

STATION NO. 10-2B-24

DATE 21 4 1953 LAT. 26° 31.5'N. LONG. 96° 00.0' W.
Day Month Year

TIME 0146 DEPTH 600 MAX. SAMPLE DEPTH 842 WIRE ANGLE 18 °
GCT Faths. Meters

WATER COLOR 10 WEATHER 02 SEA 2 SWELL 035 ° T. 2 ft.
Code Code Code Direction Hgt.

7 sec. CLOUDS Ac, As 8 TEMP. 66.1 °F. 57.0 °F.
Period Type Amount Dry Wet

BAR. 30.18 in. REL. HUM. 57% WIND 050 ° T. 3 VIS. 8
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	22.98	36.42	0.5	0.2	1	0.3	0.2
9	23.05	36.42	0.7	0.2	0	0.4	0.0
18	23.12	36.51	0.3	0.0	0	0.4	0.5
28	23.05	36.38	-	0.0	0	0.0	0.3
47	20.30	36.42	0.4	0.4	0	1.2	0.5
71	19.51	36.40	0.5	0.3	4	0.6	0.5
94	18.82	36.26	0.7	0.3	4	0.0	0.0
141	17.01	36.24	1.4	0.9	14	0.0	0.2
188	14.57	35.91	1.4	1.2	0	0.1	0.2
235	13.18	35.64	1.5	0.7	22	0.0	0.1
282	11.86	35.59	2.1	1.7	24	0.2	0.0
374	9.97	35.17	3.2	2.6	24	1.0	0.3
466	8.48	35.10	2.7	2.1	28	0.2	0.0
559	7.30	34.90	2.5	1.5	29	0.9	-
653	6.54	34.92	2.5	2.2	36	0.0	0.3
842	5.31	34.97	2.2	2.8	29	1.2	0.2

STATION NO. 10-2B-24

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	22.98	36.42	25.04	0.5	0.2	1	0.3	0.2
10	23.06	36.44	25.03	0.7	0.2	0	0.4	0.0
20	23.18	36.48	25.02	0.3	0.0	0	0.4	0.5
30	22.67	36.39	25.10	0.3	0.0	0	0.1	0.3
50	20.20	36.42	25.81	0.4	0.4	1	1.1	0.5
75	19.40	36.37	25.98	0.5	0.3	4	0.5	0.4
100	18.62	36.27	26.11	0.8	0.4	5	0.0	0.0
150	16.46	36.17	26.56	1.4	1.0	11	0.0	0.2
200	14.21	35.82	26.79	1.4	1.1	6	0.1	0.2
250	12.73	35.64	26.96	1.7	1.0	23	0.1	0.1
300	11.46	35.48	27.08	2.3	1.9	24	0.4	0.1
400	9.52	35.16	27.18	3.1	2.5	25	0.8	0.2
500	8.00	35.00	27.29	2.6	1.9	28	0.4	0.1
600	6.96	34.91	27.37	2.5	1.8	32	0.5	0.2
800	5.55	34.96	27.60	2.1	2.7	31	0.9	0.2

STATION NO. 10-2B-25

DATE 21 (Day) 4 (Month) 1953 (Year) LAT. 27° 08.5' N. LONG. 96° 00.0' W.
TIME 0718 (GCT) DEPTH 360 (Faths.) MAX. SAMPLE DEPTH 650 (Meters) WIRE ANGLE 0 °
WATER COLOR 10 (Code) WEATHER 02 (Code) SEA 1 (Code) SWELL 150 (Direction) ° T. 2 (Hgt.) ft.
6 (Period) sec. CLOUDS Ac (Type) 1 (Amount) TEMP. 66.3 (Dry) °F. 57.5 (Wet) °F.
BAR. 30.15 in. REL. HUM. 61% WIND 170° (Direction) T. 1 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	22.38	36.49	0.5	0.3	0	0.7	0.2
10	22.41	36.45	0.6	0.2	0	0.3	0.5
20	22.45	36.40	0.5	0.5	0	0.0	0.3
30	22.46	36.42	0.2	0.1	0	0.2	0.1
50	22.38	36.38	0.4	0.1	0	0.0	-
75	19.87	36.49	0.8	0.5	8	0.0	0.0
100	19.34	36.31	0.5	0.2	1	0.4	0.2
150	17.52	36.24	0.8	0.7	12	0.0	0.1
200	15.48	36.02	1.3	0.9	16	0.4	0.0
250	13.58	35.75	0.8	0.9	20	-	0.2
300	12.13	35.52	1.5	1.8	25	0.0	0.4
400	9.83	35.14	-	1.8	26	0.0	0.5
500	8.30	35.10	2.4	1.7	30	0.8	0.0
600	6.46	34.90	2.5	2.4	31	0.0	0.0

STATION NO. 10-2B-25

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	22.38	36.49	25.26	0.5	0.3	0	0.7	0.2
10	22.41	36.45	25.22	0.6	0.2	0	0.3	0.5
20	22.45	36.40	25.17	0.5	0.5	0	0.0	0.3
30	22.46	36.42	25.18	0.2	0.1	0	0.2	0.1
50	22.38	36.38	25.18	0.4	0.1	0	0.0	0.1
75	19.87	36.49	25.95	0.8	0.5	8	0.0	0.0
100	19.34	36.31	25.95	0.5	0.2	1	0.4	0.2
150	17.52	36.24	26.36	0.8	0.7	12	0.0	0.1
200	15.48	36.02	26.67	1.3	0.9	16	0.4	0.0
250	13.58	35.75	26.87	0.8	0.9	20	0.2	0.2
300	12.13	35.52	26.99	1.5	1.8	25	0.0	0.4
400	9.83	35.14	27.11	2.0	1.8	26	0.0	0.5
500	8.30	35.10	27.33	2.4	1.7	30	0.8	0.0
600	7.01	34.99	27.43	2.5	2.2	31	0.3	0.0

STATION NO. 10-2B-26

DATE 21 4 1953 (Day Month Year) LAT. 27° 45.0' N. LONG. 95° 30.0' W.

TIME 1356 (GCT) DEPTH -- (Faths.) MAX. SAMPLE DEPTH 95 (Meters) WIRE ANGLE 0 °

WATER COLOR 30 (Code) WEATHER 00 (Code) SEA 1 (Code) SWELL 100 (Direction) ° T. 1 (Hgt) ft.

5 (Period) sec. CLOUDS -- (Type) 0 (Amount) TEMP. 67.1 (Dry) °F. 59.0 (Wet) °F.

BAR. 30.12 in. REL. HUM. 62% WIND 095 (Direction) ° T. 1 (Force) VIS. 8 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	20.87	34.83	0.4	0.3	0	0.0	0.0
10	20.92	34.69	0.5	0.2	0	0.0	0.1
20	21.11	34.83	-	-	0	0.4	0.1
30	20.02	35.39	0.5	0.1	1	0.0	0.3
50	18.11	36.06	0.5	0.2	2	0.0	0.3
75	17.79	36.15	0.1	0.3	1	0.4	0.0
95	17.74	36.18	0.3	0.2	1	0.2	0.1

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	20.87	34.83	24.42	0.4	0.3	0	0.0	0.0
10	20.92	34.69	24.30	0.5	0.2	0	0.0	0.1
20	21.11	34.83	24.35	0.5	0.2	0	0.4	0.1
30	20.02	35.39	25.07	0.5	0.1	1	0.0	0.3
50	18.11	36.06	26.07	0.5	0.2	2	0.0	0.3
75	17.79	36.15	26.22	0.1	0.3	1	0.4	0.0

STATION NO. 10-2B-27

DATE 21 4 1953 (Day Month Year) LAT. 28° 09.0' N. LONG. 95° 02.0' W.

TIME 1810 (GCT) DEPTH 28 (Faths.) MAX. SAMPLE DEPTH 40 (Meters) WIRE ANGLE 0 °

WATER COLOR 20 (Code) WEATHER 03 (Code) SEA 2 (Code) SWELL 140 (Direction) ° T. 1 (Hgt.) ft.

3 (Period) sec. CLOUDS Ci.Cs (Type) 8 (Amount) TEMP. 68.2 (Dry) °F. 60.4 (Wet) °F.

BAR. 30.13 in. REL. HUM. 62 % WIND 140 (Direction) ° T. 2 (Force) VIS. 9 (Code)

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	21.50	36.06	0.6	0.4	0	0.0	0.3
10	21.41	36.04	0.4	0.2	0	0.0	0.2
20	21.37	36.09	0.4	0.1	0	0.4	0.4
30	21.22	36.13	0.7	0.2	1	0.2	0.0
40	18.31	36.08	-	-	0	0.1	0.2

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	21.50	36.06	25.18	0.6	0.4	0	0.0	0.3
10	21.41	36.04	25.19	0.4	0.3	0	0.0	0.2
20	21.37	36.09	25.24	0.4	0.1	0	0.4	0.4
30	21.22	36.13	25.31	0.7	0.2	1	0.2	0.0

STATION NO. 10-2B-28

DATE 1 5 1953 LAT. 29° 12.0' N. LONG. 94° 00.0'W.
Day Month Year

TIME 0310 DEPTH 8 MAX. SAMPLE DEPTH 12 WIRE ANGLE 0 °
GCT Faths. Meters

WATER COLOR 40 WEATHER 02 SEA 03 SWELL 165 ° T. 2 ft.
Code Code Code Direction Hgt.

7 sec. CLOUDS -- -- TEMP. 73.0 °F. 71.4 °F.
Period Type Amount Dry Wet

BAR. 26.63 in. REL. HUM. 91.3% WIND 180 ° T. 3 VIS. 9
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	22.89	31.62	0.5	0.4	3	0.0	0.2
4	22.92	31.49	0.6	0.6	4	0.0	0.2
12	22.20	31.85	0.6	0.5	3	0.2	0.2

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	22.89	31.62	---	0.5	0.4	3	0.0	0.2
10	22.40	31.61	---	0.6	0.6	4	0.1	0.2

STATION NO. 10-2B-29

DATE 1 5 1953 LAT. 29° 01.5' N. LONG. 92° 00.0' W.
Day Month Year
TIME 1555 DEPTH 8 MAX. SAMPLE DEPTH 12 WIRE ANGLE 5 °
GCT Faths. Meters
WATER COLOR 50 WEATHER 47 SEA 02 SWELL 140 ° T. 4 ft.
Code Code Code Direction Hgt.
5 sec. CLOUDS 0(St) 9 TEMP. 76.3 °F. 75.2 °F.
Period Type Amount Dry Wet
BAR. 29.70 in. REL. HUM. 95.0% WIND 130 ° T. 3 VIS. 2
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	22.82	33.12	0.5	0.3	-	0.6	0.2
4	22.80	33.10	1.7	1.0	1	0.4	0.2
12	22.74	33.19	0.6	0.4	0	0.0	0.2

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	22.82	33.12	--	0.5	0.3	-	0.6	0.2
10	22.79	33.15	--	1.2	0.7	1	0.2	0.2

STATION NO. 10-2B-30

DATE 1 5 1953 LAT. 28° 21.5' N. LONG. 92° 00.0' W.
Day Month Year

TIME 2105 DEPTH 35 MAX. SAMPLE DEPTH 50 WIRE ANGLE 5 °
GCT Faths. Meters

WATER COLOR 10 WEATHER 42 SEA 3 SWELL 170 ° T. 3 ft.
Code Code Code Direction Hgt.

6 sec. CLOUDS St 1 TEMP. 76.4 °F. 75.6 °F.
Period Type Amount Dry Wet

BAR. 29.68 in. REL. HUM. 100 % WIND 120 ° T. 3 VIS. 4
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	22.92	36.29	0.7	0.4	0	1.3	0.0
10	22.05	36.29	0.8	1.0	2	0.2	0.1
20	22.06	36.27	1.2	0.5	2	0.0	0.3
30	22.01	36.29	0.5	0.6	2	0.2	0.3
50	19.85	36.27	0.5	0.3	1	0.5	0.3

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	22.92	36.29	24.95	0.7	0.4	0	1.3	0.0
10	22.05	36.29	25.20	0.8	1.0	2	0.2	0.1
20	22.06	36.27	25.18	1.2	0.5	2	0.0	0.3
30	22.01	36.29	25.21	0.5	0.6	2	0.2	0.3
50	19.85	36.27	25.79	0.5	0.3	1	0.5	0.3

STATION NO. 10-2B-31

DATE 2 5 1953 LAT. 27° 41.5' N. LONG. 92° 00.0' W.
Day Month Year

TIME 0310 DEPTH 400 MAX. SAMPLE DEPTH 396 WIRE ANGLE 0 °
GCT Faths. Meters

WATER COLOR 10 WEATHER 02 SEA 3 SWELL 180 ° T. 3 ft.
Code Code Code Direction Hgt.

6 sec. CLOUDS - 5 TEMP. 77.1 °F. 74.9 °F.
Period Type Amount Dry Wet

BAR. 29.72 in. REL. HUM. 91 % WIND 200 ° T. 3 VIS. 5
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	23.86	34.94	0.4	0.2	2	1.0	0.1
8	23.88	36.42	0.3	0.5	0	0.0	0.2
25	23.90	36.45	0.6	0.5	3	0.4	0.9
40	23.53	36.42	0.3	0.3	1	0.0	0.3
56	23.33	36.42	0.7	0.6	2	0.9	0.7
73	22.13	36.42	0.4	0.2	0	4.0	0.9
108	19.39	36.35	0.4	-	8	0.6	0.2
143	18.04	36.31	1.5	1.0	14	0.4	0.4
180	15.91	36.06	1.1	0.9	13	0.1	0.1
220	---	36.00	1.3	1.2	18	0.8	0.3
306	11.04	35.39	2.3	1.6	17	0.0	0.3
396	8.60	35.03	1.9	1.9	30	0.0	0.9

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	23.86	34.94	23.66	0.4	0.2	2	1.0	0.1
10	23.91	36.43	24.77	0.3	0.5	0	0.0	0.3
20	23.94	36.45	24.78	0.5	0.5	2	0.3	0.7
30	23.76	36.44	24.82	0.5	0.4	2	0.3	0.7
50	23.51	36.42	24.88	0.6	0.5	2	0.6	0.6
75	21.94	36.42	25.33	0.4	0.2	0	3.8	0.9
100	19.89	36.36	25.85	0.4	0.5	6	1.4	0.4
150	17.61	36.25	26.34	1.4	1.0	14	0.3	0.3
200	15.02	36.05	26.79	1.2	1.1	15	0.5	0.2
250	12.99	35.76	27.00	1.6	1.3	18	0.5	0.3
300	11.23	35.42	27.08	2.2	1.6	17	0.1	0.3

STATION NO. 10-2B-32

DATE 2 5 1953 LAT. 27° 00.0' N. LONG. 91° 57.0' W.
Day Month Year

TIME 1100 DEPTH 900 MAX. SAMPLE DEPTH 1486 WIRE ANGLE 10°
GCT Faths. Meters

WATER COLOR 00 WEATHER 00 SEA 3 SWELL 160 ° T. 3 ft.
Code Code Code Direction Hgt.

5 sec. CLOUDS St 1 TEMP. 75.9 °F. 75.9 °F.
Period Type Amount Dry Wet

BAR. 29.74 in. REL. HUM. 100 % WIND 145 °T. 2 VIS. 4
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	23.86	---	0.3	0.2	-	0.0	0.4
10	23.86	36.51	0.9	0.4	0	0.0	0.3
25	23.50	36.49	0.5	0.2	3	0.0	0.3
49	23.39	36.47	1.0	1.0	2	0.3	0.3
74	20.23	36.36	0.7	0.3	4	0.0	0.1
98	18.42	36.33	1.5	0.3	12	0.2	0.2
147	15.96	36.08	3.1	1.7	16	-	0.0
196	14.19	35.81	1.3	1.2	23	0.0	0.3
293	10.97	35.34	1.6	1.5	26	0.2	0.0
390	8.93	35.05	2.4	1.8	28	0.8	0.0
488	7.37	34.88	2.7	2.1	21	0.3	0.4
587	6.41	34.85	2.3	2.5	26	0.0	0.1
785	5.21	34.87	2.3	2.4	25	0.2	0.2
985	4.64	34.90	2.0	1.7	22	0.6	0.1
1185	4.29	34.97	2.4	1.9	21	2.0	0.3
1486	4.16	34.94	1.5	1.2	21	0.3	0.1

STATION NO. 10-2B-32

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	23.86	36.53	24.86	0.3	0.2	-	0.0	0.4
10	23.86	36.51	24.85	0.9	0.4	0	0.0	0.3
20	23.60	36.50	24.91	0.6	0.3	2	0.0	0.3
30	23.71	36.49	24.87	0.6	0.4	3	0.1	0.3
50	23.24	36.46	24.99	1.0	1.0	2	0.3	0.3
75	20.15	36.36	25.78	0.7	0.3	4	0.0	0.1
100	18.31	36.32	26.22	1.6	0.4	12	0.2	0.2
150	15.85	36.06	26.61	3.0	1.7	16	0.1	0.0
200	14.03	35.79	26.81	1.3	1.2	23	0.0	0.3
250	12.25	35.53	26.97	1.5	1.4	25	0.1	0.1
300	10.81	35.32	27.08	1.7	1.5	26	0.2	0.0
400	8.74	35.03	27.20	2.4	1.8	27	0.7	0.0
500	7.24	34.87	27.30	2.7	2.1	22	0.3	0.4
600	6.31	34.85	27.41	2.3	2.5	26	0.0	0.1
800	5.16	34.87	27.57	2.3	2.3	25	0.3	0.2
1000	4.61	34.91	27.67	2.0	1.7	22	0.7	0.1
1200	4.27	34.97	27.76	2.4	1.9	21	1.9	0.3

STATION NO. 10-2B-33

DATE 2 5 1953 LAT. 26° 30.0' N. LONG. 91° 59.0' W.
Day Month Year
TIME 1623 DEPTH 1000 MAX. SAMPLE DEPTH 835 WIRE ANGLE 60°
GCT Faths. Meters
WATER COLOR 00 WEATHER 05 SEA 4 SWELL 175 ° T. 5 ft.
Code Code Code Direction Hgt.
5 sec. CLOUDS 0 (St) 7 TEMP. 77.0 °F. 77.0 °F.
Period Type Amount Dry Wet
BAR. 29.80 in. REL. HUM. 100 % WIND 180 °T. 4 VIS. 6
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	23.86	36.45	13.2	5.3	0	-	0.4
2	23.84	36.45	0.3	0.1	0	-	0.3
8	23.70	36.53	0.6	0.3	1	0.0	0.5
28	20.72	36.38	0.7	0.4	2	0.0	0.3
32	19.58	36.40	0.5	0.2	3	26.6	0.1
44	20.61	36.38	0.5	0.3	2	0.0	0.1
66	19.27	36.42	0.9	0.4	8	0.0	0.1
87	17.78	36.33	0.8	0.4	12	1.2	0.4
135	15.47	36.02	1.5	1.1	14	0.2	0.1
184	13.82	35.84	1.0	0.9	21	1.0	0.3
234	12.30	35.52	-	1.5	20	0.8	0.5
284	11.28	35.53	2.2	1.8	0	0.0	0.1
436	---	*36.47	0.3	0.3	26	0.0	0.2
595	11.32	35.43	-	1.6	29	0.7	0.1
777	5.62	35.03	2.0	1.8	29	0.0	0.5
835	5.10	35.08	1.0	1.0	36	green	0.0

*Values not used to draw smooth curves.

STATION NO. 10-2B-33

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	23.86	36.45	24.80	13.2	5.3	0	--	0.4
10	23.61	36.50	24.91	0.6	0.3	1	0.0	0.5
20	22.46	36.39	25.16	0.7	0.4	2	0.0	0.4
30	20.06	36.39	25.82	0.6	0.3	3	13.3	0.2
50	20.27	36.40	25.78	0.6	0.3	4	0.0	0.1
75	18.60	36.38	26.20	0.9	0.4	10	0.5	0.2
100	17.09	36.23	26.45	1.0	0.6	13	0.9	0.3
150	14.95	35.98	26.76	1.3	1.0	16	0.4	0.2
200	13.28	35.70	26.90	1.3	1.1	21	0.9	0.4
250	11.94	35.51	27.01	1.8	1.6	14	0.6	0.4
300	11.58	35.72	27.25	2.0	1.6	3	0.0	0.1
400	12.74	36.42	27.56	0.8	0.7	20	0.0	0.2
500	12.62	35.97	27.24	0.6	0.8	27	0.3	0.2
600	11.08	35.41	27.10	1.1	1.6	29	0.7	0.1
800	5.34	35.04	27.69	1.6	1.5	32	-	0.3

STATION NO. 10-2B-34

DATE 2-3 5 1953 LAT. 26° 00.0' N. LONG. 92° 00.0' W.
Day Month Year

TIME 0018 DEPTH 1200 MAX. SAMPLE DEPTH 1416 WIRE ANGLE 18°
GCT Faths. Meters

WATER COLOR 10 WEATHER 01 SEA 3 SWELL 140 ° T. 3 ft.
Code Code Code Direction Hgt

6 sec. CLOUDS -- 0 TEMP. 77.0 °F. 77.0 °F.
Period Type Amount Dry Wet

BAR. 29.76 in. REL. HUM. 100% WIND 140 ° T. 3 VIS. 6
Direction Force Code

OBSERVED VALUES

Depth	Temp. °C	Sal. ‰	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.01	36.53	0.5	0.3	0	0.2	0.2
9	24.90	36.55	0.3	0.3	1	0.1	0.2
23	24.22	36.53	0.2	0.2	1	0.1	0.0
47	21.25	36.53	0.1	0.0	4	0.0	0.4
70	19.12	36.36	-	-	8	0.0	0.1
93	17.63	36.35	-	-	13	1.0[a]	0.0
139	15.21	36.00	0.4	0.3	20	0.0	0.5
184	13.19	35.66	0.7	0.6	17	0.2[a]	0.1
276	11.14	35.52	0.9	0.8	28	1.0	0.3
368	9.45	35.14	1.1	0.4	28	0.6	0.2
461	7.96	34.96	2.5	2.2	32	1.6	0.1
554	6.88	34.88	2.5	2.5	32	0.0	1.1
834	5.02	34.94	1.9	1.8	4	0.2	0.2
1121	4.35	35.05	2.0	1.8	-	-	0.0
1416	4.18	34.97	2.0	1.9	25	0.0	0.2

(a) Green carbohydrates.

STATION NO. 10-2B-34

VALUES AT STANDARD DEPTHS

Depth	Temp. °C	Sal. ‰	σ_t	Total PO_4-P	Inorg. PO_4-P	NO_3-N	Carb. Mg/l	Prot. Mg/l
0	25.01	36.53	24.51	0.5	0.3	0	0.2	0.2
10	24.88	36.55	24.57	0.3	0.3	1	0.1	0.2
20	24.43	36.53	24.69	0.2	0.3	1	0.1	0.0
30	23.27	36.55	25.05	0.2	0.2	2	0.1	0.1
50	20.94	36.50	25.67	0.1	0.0	5	0.0	0.4
75	18.78	36.37	26.14	0.2	0.1	9	0.2	0.1
100	17.24	36.30	26.47	0.3	0.2	14	0.8	0.1
150	14.65	35.90	26.76	0.5	0.4	19	0.0	0.4
200	12.81	35.65	26.95	0.7	0.6	19	0.3	0.1
250	11.68	35.58	27.12	0.8	0.7	25	0.8	0.2
300	10.68	35.40	27.16	1.0	0.7	28	0.9	0.3
400	8.89	35.07	27.21	1.6	1.0	29	0.9	0.2
500	7.48	34.92	27.31	2.4	2.3	32	0.9	0.5
600	6.49	34.89	27.42	2.4	2.4	27	0.0	1.0
800	5.18	34.93	27.62	2.0	1.9	7	0.2	0.3
000	4.57	35.03	27.77	2.0	2.3	10	0.1	0.1
200	4.25	35.05	27.82	2.0	1.8	17	0.1	0.1

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